EXPLORING THE EXPERIENCE OF CARE FOR POSTPARTUM DEPRESSION: A SOCIOECOLOGICAL, QUALITATIVE ANALYSIS

by

Anne F. Mahalik

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DEDICATION PAGE

I want to dedicate this thesis to the moms who opened their lives and their hearts to me; your strength and courage are truly inspiring. I hope that I have been able to capture your experiences and share your stories in a way that makes you proud.

I also dedicate this to Sophie and Mila, who have taught me that I don't need to be perfect to be a good mother. And to Richard, for everything.

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ABSTRACT

The birth of a child is considered by many to be among the happiest times in a woman's life. For many women, however, this experience may be marked by feelings of helplessness, irritability, and being overwhelmed. Approximately 9% of new mothers are reported to suffer from postpartum depression. Left untreated, postpartum depression has been associated with insecure attachment in infants and cognitive and emotional difficulties later in life. This study examined the lived experience of treatment for postpartum depression, from the perspectives of mothers, maternal mental health care providers, and family physicians. This experience was examined through the lens of a five-level socioecological model to provide insight into how various levels of influence play a role in the experience of treatment for postpartum depression. Participants' experiences were captured through qualitative descriptive inquiry and analysed thematically.

LIST OF ABBREVIATIONS USED

MES Maternal Experiences Survey

RMHS Reproductive Mental Health Service IWK Izaak Walton Killam Health Centre

PPD Postpartum depression FP Family physician HCP Health care provider

SDOH Social Determinants of Health

SEM Socioecological Model

EPDS Edinburgh Postnatal Depression Survey

PI Principle investigator LICO Low income cut-off

CIHI Canadian Institute for Health Information

REB Research Ethics Board KT Knowledge translation

NM New mother

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I want to acknowledge the never ending support and shared wisdom of Team Anne. It has been my absolute privilege to work with this knowledgeable and dedicated group of women.

Thank you to my mom, who taught me that I could do anything, and to my dad, who was with me every step of the way.

CHAPTER 1 INTRODUCTION

1.1 Postpartum Depression

Postpartum depression (PPD) is a significant complication of pregnancy and childbirth (O'Hara & Wisner, 2014). According to the Maternity Experience Survey (MES), conducted with over 6000 women in Canada who had a live birth between 2006 and 2007, 8.69% of new mothers suffer from PPD (Lanes, Kuk & Tamim, 2011). For many women the postpartum period is an inherently stressful time marked by a unique vulnerability (Class, Verhulst & Heiman, 2013). Women undergo extensive recovery and transition, including physiological changes and adaptation to the new role of motherhood.

Symptoms of PPD, including mood fluctuation, irritability, tearfulness, and lack of attention to self-care, are similar to depressive symptoms that may occur at any other time in a woman's life with additional features of extreme fatigue, feelings of overwhelming responsibility, either hyper-concern for baby's well-being or apathy toward the infant, with onset of symptoms occurring within the first year postpartum (O'Hara, 2009; Letourneau, Tramonte & Willms, 2013). It may be associated with poor maternal functioning and decreased quality of parenting (Lanes, et al., 2011; Letourneau, et al., 2013). Given that an infant is almost wholly dependent on parental care in the first year of life, their immediate health and long term development is highly influenced by their early relationships with caregivers (Dennis, Heaman & Vigod, 2012) making them particularly vulnerable to mothers' changes in mood and her (in)ability to meet the demands of her new role. PPD adversely affects a woman's ability to take care of herself and mother her infant (Logsdon, Wisner & Pinto-Foltz, 2006; Sword, Busser, Ganann, McMillan & Swinton, 2008). Ongoing, untreated depression can interfere with parenting

and is associated with insecure attachment in infants and a variety of childhood emotional, behavioural and cognitive difficulties in the near and long term (Holopainen, 2002; O'Hara, 2009; O'Hara & McCabe, 2013).

1.2 Treatment options

PPD has been shown to respond to a number of treatment modalities (O'Hara & McCabe, 2013). Although there is no one treatment option that has been found to work best for every mother, both pharmacological and psychosocial interventions have shown benefit over no treatment in relieving symptoms of PPD (Bowen, Bowen, Butt, Rahman & Muhajarine, 2012; Fitelson, Kim, Scott Baker & Leight, 2011). Treatment could include a range of interventions including interpersonal therapy (individual and group), cognitive-behavioral therapy, psychodynamic therapy, and psychoeducation, and/or pharmacological intervention such as antidepressant medication (Fitelson et al., 2011; McCarthy & McMahon, 2008; O'Hara, 2009; Sharma & Sharma, 2012). Psychosocial interventions could also include simple advice and reassurance, non-judgemental listening, peer and partner support and non-directive counselling (Fitelson et al., 2011). Mothers may also seek reduction of symptoms through complementary and alternative treatments such as exercise, yoga, acupuncture, massage, and bright light therapy (O'Hara & Wisner, 2014).

The Reproductive Mental Health Service (RMHS) at IWK Health Centre (IWK), located in Halifax, Nova Scotia, provides a targeted treatment program for women struggling with PPD. Patients of this service may come from throughout the Maritime Provinces but typically reside within Halifax Regional Municipality to allow them to attend sessions regularly (J. MacDonald, personal communication, September 3, 2012).

Health care professionals at RMHS may include reproductive psychiatrists, perinatal social workers, mental health nurse specialists, and psychologists (IWK Health Centre, 2016). They assist women with mental health concerns affecting them during reproductive care, including the time during pregnancy or just after a baby is born, for up to one year. These concerns could include new or returning problems related to mood, thinking and coping with everyday tasks. They may also see women with depression, anxiety, previous trauma or assault, miscarriages, other losses or grief, high-risk pregnancies, and other major adjustment difficulties (IWK Health Centre, 2016). Treatment options provided are recommended on an individual basis depending on each woman's needs, including the severity of her illness and level of distress, previous experience with treatment, and access to resources (Fitelson et al., 2011). She may receive inpatient care or ongoing treatment through the RMHS clinic. Other options may include referral to other health care providers or community-based resources; self-care strategies; psychotherapies; individual or group treatment; and medications where appropriate (IWK Health Centre, 2016).

Patients in RMHS at IWK must be formally referred to the clinic by their primary health care provider, typically a family physician or nurse practitioner. Friends, family, or even community health workers such as Public Health nurses and counselors at Parent Resource Centres across Nova Scotia may encourage a mother to seek help if they see that she is struggling with symptoms of depression, however, this would depend on their having knowledge of such symptoms and the willingness of the mother to acknowledge these symptoms. Mothers may or may not be comfortable talking about how they are feeling in a group of relative strangers or with an unknown health care provider. Some

women may be more comfortable disclosing their concerns to a trusted friend or family member without fear of being judged, whereas others may prefer the "anonymity" of working with a health professional and they may never disclose their illness and its symptoms, even to those closest to them.

In recent years referral of patients to RMHS has changed due, in part, to changes in staffing and mandate. The patients being seen at the clinic at the time of the study typically had more complex diagnoses than simply PPD, in contrast to years prior to the study when most women who were referred with fairly mild symptoms of PPD, anxiety, or adjustment disorder would have received treatment at RMHS (J. MacDonald, personal communication, June 9, 2014; T. Tulipan, personal communication, December 13, 2013). This has left limited opportunity for mothers struggling with less complex illnesses, such as PPD or adjustment, to be seen at RMHS. As a result of this many women are receiving treatment for PPD from their regular health care provider or family physician (FP) rather than from a perinatal mental health specialist. Treatment options available from their FP may differ from what is available at RMHS in that a FP would not be expected to have specific training in non-pharmacologic treatment options. On the other hand, the FP may have an increased level of knowledge of a mother's family situation and previous history, and multiple opportunities to assess the mother during well baby visits.

Although a FP may not have the specialized knowledge and experience with maternal mental health that could be found in a targeted treatment program such as RMHS at IWK, they offer a number of benefits not available in a specialized service. According to the College of Family Physicians of Canada (2016), family physicians are governed by the "Four Principles of Family Medicine":

The family physician is a skilled clinician.

Family medicine is a community based discipline.

The family physician is a resource to a defined practice population.

The patient-physician role is central to the role of family physicians.

Because the FP has an in-depth knowledge of a mother's history and multiple assessment opportunities, they would be well equipped to discern a change in a mother's behavior and affect after birth. Their clinical skills could allow them to recognize qualities of regular adjustment to motherhood unique to each woman and symptoms more specific to a change in mood requiring treatment. Family practices are typically located within the community rather than being located within a hospital. This allows the FP to be attuned to various factors affecting the community as a whole, to collaborate with other health care providers in the community, and to be aware of resources available to mothers and their families located within their own community. FPs are required to keep abreast of new information and evidence based treatment relevant to their patients, allowing them to act as a resource and offer effective treatment or management of their condition. The "continuing care" and subsequent relationship that develops between a FP and a mother and her family represents a long-term commitment to their health. In many ways an individual's FP is in the best person to provide relevant and effective care to new mothers (College of Family Physicians of Canada, 2016).

In contrast, FPs also face a number of barriers in their practice, the most common being a lack of time to spend with patients. The number of patients seen on a daily basis by many FPs may prevent them from spending additional time with mothers who are struggling in the postpartum period. Family physicians may also be limited by their remuneration model whether it is a more traditional fee-for-service model, or alternative funding plan, in the services they are able to offer to patients. They may also have limited

opportunity to collaborate with other health professionals, and to keep abreast of new information regarding treatment, or new resources available within the community

1.3 Social Determinants of Health

Research has shown that the primary factors to influence the health of Canadians are not necessarily lifestyle choices and ready access to health care (Raphael & Mikkonen, 2010). Instead, whether a person is healthy or not is largely based on the situation in which they live. The conditions contributing to individual situations are collectively known as the social determinants of health (SDOH). Raphael and Mikkonen (2010) developed a model of fourteen social determinants of health: income and income distribution; level of educational attainment; unemployment and job security; employment and working conditions; early childhood development; food security; housing; social exclusion; social safety network; access to health services; aboriginal status; gender; race; and disability. Individuals may have only limited or no control over some or all of these factors.

Similar to a person's health following other significant life events, the lived experience of PPD is influenced by the SDOH (Abrams & Curran, 2011; Lanes et al., 2011; Dennis et al., 2012). The weeks and months following the birth of a child is a time of major change in a woman's life. Those considered to be socially disadvantaged (e.g., low household income, low educational achievement, poor social support) are faced with additional challenges and are at increased risk of poor health outcomes (Benoit, Westfall, Bonfonti & Nuernberger, 2006; Kurtz Landy, Sword & Ciliska, 2008; Kurtz Landy, Sword & Valaitis, 2009; Boyd, Mogul, Newman & Coyne, 2011); Lanes et al., 2011; Dennis et al., 2012), including PPD (Goyal, Gay & Lee, 2010; Segre, O'Hara, Arndt &

Stuart, 2007; Tandon, Leis, Mendelson, Perry & Kemp, 2014; Zubaran et al., 2010). Their ability to meet these challenges will depend on many factors. Some factors, such as community support, may serve as a protective resource, whereas environmental stressors such as chronic poverty or unemployment may serve to increase her challenges relevant to recent and ongoing depressive symptoms (O'Hara & McCabe, 2013). A better understanding of women's postpartum experiences and of receiving treatment for PPD is essential to the development of appropriate health policies and services that will help meet their needs (Kurtz Landy et al., 2009).

1.4 Research Objectives

This study examined the lived experience of PPD, specifically how this experience is influenced by participation in treatment. New mothers and health care providers in the RMHS at IWK; mothers receiving treatment in the community; and family doctors providing treatment in the community were interviewed to gain a broad perspective of these influences on a women's experience with PPD. This phenomenon was examined through the lens of a five-level socioecological model (SEM). Examining mothers' experience from the perspective of each of the levels in this model, i.e., individual, interpersonal, environment, and systems, will provide insight into how the various factors or levels of influence in a woman's life play a role in her experience with PPD and participation in treatment.

1.5 Purpose/Relevance

The purpose of this study was to create knowledge about how treatment for PPD and aspects of her socioeconomic environment may influence a woman's experience with this

illness. A better understanding of the influences of treatment for PPD will help health professionals tailor their treatments more closely with what is most beneficial or engaging to women. Providing mothers with the opportunity to speak about their experiences with PPD may provide them with the confidence or impetus to share their stories and experiences with family and friends, bringing a message of support to others. Hearing from participants about their experiences with treatment will help program administrators and policy decision makers to understand whether the programs and supports currently in place are adequate or whether it would be beneficial to provide additional and/or different resources. Application of a SEM and exploration of various social influences on mothers' experiences with PPD will help health professionals to provide more rounded and personalized care for their patients within these intersecting contexts. Discussion of their social environment and living conditions will help to provide information on what additional factors may have an effect on women's ability to adapt to the responsibilities of new motherhood and to fully engage in their treatment and recovery from PPD. A better understanding of these influences will help health care providers and family doctors to offer more focused treatment to the women in their care and to assist them in being engaged in treatment and in their own recovery.

CHAPTER 2 LITERATURE REVIEW

2.1 Postpartum Depression

Having a baby is a life changing event that brings with it significant physical challenges and a transformation in self-concept, relationships, and responsibilities that render a woman particularly vulnerable to emotional difficulties (Woolhouse, Brown, Krastev, Perlen & Gunn, 2009). This comes at a time when personal expectations and those of the world around them say that a mother will feel content and joyful following the birth of their baby. If a mother does not feel an instant connection to her baby, is overwhelmed by her new role, or has difficulty resuming her previous life, she may develop feelings of guilt, isolation, and helplessness characteristic of PPD (Fitelson et al., 2011).

- 2.1.1 Prevalence. In recent years there has been increasing concern and attention given to the impact of PPD on women, their families, and their ability to function in their everyday lives. The prevalence of PPD in Canada based on the Maternity Experiences Study (MES) of the Canadian Perinatal Surveillance System was found to be 8.69% for major depression (Lanes et al., 2011). Major depression was defined by the authors as a "clinical syndrome that has a clinical treatment process" (p. 303). The MES was conducted by Statistics Canada between 2006 and 2007. PPD was determined by a score > 13 on the Edinburgh Postnatal Depression Survey (EPDS).
- **2.1.2 Diagnosis.** For many women, the postpartum period and adjustment to motherhood, whether it is the first baby or subsequent babies, brings about symptoms such as fatigue, crying, and hopelessness, which are a commonly accepted experience of settling into motherhood (Class et al., 2013). However, for some mothers, these symptoms do not go away after a few weeks and may be indicative of a more serious

illness. Symptoms of PPD are varied and may significantly disrupt a mother's ability to function. Symptoms may include extreme fatigue, diminished capacity for decisionmaking, loss of concentration, lack of self-esteem, and confusion (Letourneau et al., 2013; McCarthy & McMahon, 2008). Other symptoms could include those commonly associated with depression seen in other areas of life, including emotional lability, mood fluctuation, irritability, sleep disturbance, confusion, negative thinking, hopelessness, isolation, and suicidal ideation with features specific to the postpartum period such as excessive guilt, anxiety related to baby's well-being, and lack of self-care (Letourneau et al., 2013; McCarthy & McMahon, 2008; McIntosh, 1993; O'Hara, 2009). Although the timeframe is not entirely agreed upon in the clinical and research communities, PPD is differentiated from regular depression in that it follows the significant life event of giving birth, with onset taking place within one year postpartum (Davies, Howells & Jenkins, 2003; Dennis et al., 2012; Letourneau et al., 2013; O'Hara & Wisner, 2014). The diagnosis of PPD may indicate an episode of major or minor depression; women should meet diagnostic criteria (Diagnostic and Statistical Manual (DSM) or International Classification of Diseases) for depression with postpartum onset or reach a specified threshold on a validated depression tool such as the Edinburgh Postnatal Depression Survey (EPDS; O'Hara & McCabe, 2013; O'Hara & Wisner, 2014). The most rigorous assessment occurs in the context of a clinical interview: Structured Clinical Interview for Diagnosis leading to a DSM diagnosis, and would be undertaken by a mental health professional (O'Hara & Wisner, 2014).

2.1.3 Risk Factors. There are a number of risk factors that are commonly associated with PPD. The development of PPD is related to the dynamic interplay of

biological, interpersonal, and socioeconomic factors (Fitelson et al., 2011; O'Hara & Wisner, 2014). According to O'Hara & Wisner (2014), these risk factors can be divided into three "constellations", history of psychiatric illness (mild to severe), life stress, and poor relationships. Additional risk factors could include a woman's physiological sensitivity to changing hormones postpartum (O'Hara & McCabe, 2013); specific history of depression during pregnancy (Dennis et al., 2012; O'Hara & Wisner, 2014); low socioeconomic status, being single, low self-esteem, obstetrical stressors, unwanted pregnancy, difficult infant temperament (O'Hara & Wisner, 2014); lower education, income, and social context (Benoit, Westfall, Treloar, Phillips & Jansson, 2007); and experiencing intimate partner violence within the previous twelve months (Dennis et al., 2012).

2.1.4 Impact/Outcome. Symptoms of depression in the postpartum period can have multiple and significant negative effects on a mother and her family. These symptoms may reduce a woman's ability to transition to her new role as a mother, and may also affect relationships with her partner, older children, and other family members. Depression among new mothers can also impair a woman's ability to function optimally. It can be difficult for her to find time and motivation for self-care activities such as taking a shower, getting dressed, or leaving the house to meet friends or attend appointments. Throughout the first year of life, infant development is highly sensitive to the quality of parental interaction (Dennis et al., 2012). High levels of stress and associated mental illness have deleterious effects on both maternal and child outcomes during the first year, during adolescence, and possibly into adulthood (O'Hara & Wisner, 2014). PPD has also been shown to negatively influence many caretaking behaviors (Class et al., 2013;

O'Hara & McCabe, 2013). This may prevent the mother from providing the loving and consistent care needed to develop a secure attachment (Bowen, et al., 2012); she may be less likely to respond to infant cues, resulting in less positive feedback and decreased likelihood of meeting baby's needs; and may be less nurturing and responsive in interactions, and more negative in play (Letourneau et al., 2013; O'Hara & McCabe, 2013). There may be additional barriers to developing a secure attachment with her baby, related to the mother's functional impairment, the SDOH, and her ability to provide appropriate physical and intellectual stimulation (Sword et al., 2008).

Families may also feel significant disruption throughout the course of this illness (McCarthy & McMahon, 2008; Sword et al., 2008). Emotional withdrawal and functional impairment related to the mother's depression can impact family functioning by contributing to relationship challenges between parents, poor interaction with children, and an inability to maintain a household in the same manner as before the baby was born (Bowen et al., 2012; Letourneau et al., 2012). Research is now showing a complementary PPD in fathers, contributing to poor communication between partners, feelings of being overwhelmed, isolated, and stigmatized, and leading to lower quality interaction with children (Letourneau et al., 2012).

The negative effects of PPD are not limited to the postpartum period. Maternal depression has been linked to poor long-term outcomes in children, including cognitive, emotional, and behavioral difficulties (Letourneau, Salmani & Duffet-Leger, 2010; Logsdon et al., 2006), believed to be a result of the negative impact of depressive symptoms on parenting qualities (Letourneau et al., 2013). Mother-child interactions have a specific impact on the development of children's self-esteem and emotional well-

being (Letourneau et al., 2012). More women are continuing to experience depressive symptoms beyond the postpartum year, which points to this potentially becoming a chronic illness for many women (Dennis et al., 2012). According to Horowitz et al. (2009) the persistence in depressive symptoms beyond the first postpartum year indicates that women are likely to experience ongoing symptoms.

An additional potential negative effect of PPD is the stigma felt by mothers with a mental health diagnosis. Stigma is the negative social response to others based on their perceived difference from societal norms (Patten et al., 2016; Pinto-Foltz & Logsdon, 2008). It may be enacted by an individual or group resulting in social exclusion and discrimination, but it is deeply felt by "the other", resulting in social isolation and shame. Mothers experiencing stigma associated with PPD may delay seeking help for their illness based on their fear of negative social interaction with their family, friends, and other mothers (Patten et al., 2016; Pinto-Foltz & Logsdon, 2008).

2.2 Experience with treatment & help-seeking behavior

The year after a baby is born can be a challenging time for mothers. It may be especially difficult for women with new or existing mental health problems (Megnin-Viggars, Symington, Howard & Pilling, 2015). Symptoms of depression, exacerbated by lack of sleep, feeling overwhelmed, and transition to a new role can impair mothers' ability to seek help for problems related to mood.

2.2.1 Mothers' experience with treatment. Despite the attention paid to the public health burden of PPD, there has been little research exploring women's experience with treatment. Only one study was found to exclusively examine women's experience and to explore the factors associated with engagement and participation in treatment.

Fifteen women who had completed treatment for PPD in New Zealand participated in a study by McCarthy and McMahon (2008). Women were diagnosed by clinical interview and participated in treatment for a range of 3 to 12 months. Mothers received a variety of treatments, including home visits, individual or group counselling, medication, and hospitalization. All of the mothers who participated had identified that something was wrong but were unable to identify the difference between "normal" distress and the need to seek professional help. Following the study mothers were able to identify that disclosure of their distress to HCPs allowed them to eventually share how they were feeling with family and friends, and then to seek out other mothers for support. Mothers indicated social contact was key to their recovery. Women showed a great deal of relief at having a diagnosis to provide a reason for how they were feeling. Through the process of treatment, mothers overcame their fear of stigma, or negative perceptions of others, related to their illness

Several studies reported on women's experience with treatment as part of a trial for a specific intervention, most commonly, a variation of the "listening visit". A listening visit is a routine intervention in the UK for women with symptoms of PPD, provided by a health visitor, a maternal health nurse or midwife with additional training in non-directive counselling (Shakespeare, Blake & Garcia, 2006; Slade et al., 2010; Turner, Chew-Graham, Folkes & Sharp, 2010). In the study by Shakespeare et al. (2006), mothers were included even if they had received only one listening visit. Mothers did not like the unstructured style of the listening visit, and noted that listening visits did not substitute for therapy, making a small contribution to their recovery. Mothers indicated they simply

felt better over time as their baby settled into a routine and they began to feel less tired (Shakespeare et al., 2006).

Thirty women with "probable depression" (as indicated by EPDS score) participated in a study exploring mothers' experience with identification and management of symptoms of PPD as they related to acceptance of care by specially trained health visitors (Slade et al., 2010). Health visitors in this study received additional training in the recognition of depression symptoms, cognitive-behavioural therapy and personcentred intervention skills (Slade et al., 2010). Results indicate that these additional skills and the ability of health visitors to develop a relationship with mothers had a positive influence on mothers' experience with postnatal care. Health visitor sessions were valued particularly for mothers' opportunity to speak with someone non-judgmental and accepting of her symptoms.

Turner et al. (2010) presented results related to women's experiences with research-health-visitor-delivered listening visits as treatment for PPD, part of a larger study comparing effectiveness of antidepressants with listening visits. Twenty-two women who had been randomized to the health visitor protocol (Turner et al., 2010) were recruited based on their scores on the EPDS. These mothers received a series of four to eight listening visits delivered by specially trained health visitors, which mothers described as beneficial although many women required additional intervention. Listening visits were reported as beneficial according to mothers because they provided a dedicated person for mothers to talk to, and because of the trusting and supportive relationship with the health visitor. Mothers in this study indicated they were reluctant to seek help from

their FP because they were worried they would be prescribed medication and there would be no opportunity to discuss their feelings.

Twenty-seven additional women randomized to the antidepressant protocol of the above study were also interviewed following treatment (Turner, Sharp, Folkes & Chew-Graham, 2008). Most participants reported a slight but continued change in mood. Many of the participants noted they were reluctant to take medication at the beginning of the trial, citing concerns regarding possible addiction and being labelled as a "bad mother", resulting in poor adherence to medication as treatment. Because these results were part of a larger study, mothers were asked to identify their preference for either medication or counselling at the beginning of the trial. Participants who identified a preference for medication did so because they felt supported by their FP and by friends and family. Those who indicated a preference for counselling were reluctant to ask their FP for medication and did not have family and friends to talk to about their concerns. Most participants in the antidepressant trial reported benefits of taking medication. Key results identified the importance for FPs to continue to prescribe medication beyond symptom relief and to provide a biological explanation for the need for antidepressants.

Several studies focusing on help seeking behaviour identified mothers' experiences with treatment as a theme. Many women found their experience with treatment to be helpful. The majority of women in a study by Woolhouse et al. (2009) where 1385 women in Australia completed a telephone survey nine months following birth, indicated that HCPs were helpful when they sought help for PPD, specifically citing emotional support, counselling, and medication as the most helpful. McIntosh (1993) spoke with sixty first –time mothers who reported having experienced a depressed

mood for at least two weeks' duration during the first nine months postpartum. Although the majority of mothers did not seek treatment, those who did indicated that speaking to a health professional provided some reassurance that their experience was not unique to them and helped mothers to normalize their experiences (McIntosh, 1993). Mothers who participated in a study by Sword et al. (2008) noted that the interpersonal skills of the HCP were key to their ability to provide appropriate support. These mothers described care-seeking behaviour following a referral for PPD (Sword et al., 2008). Although reporting that they did not know where to seek help initially, mothers identified the maternal health nurse, FP and personal support network as crucial supports by women in a study of women's experience of support and treatment for PPD in Australia (Holopainen, 2002).

Mothers also identified aspects of help seeking that were not helpful during their search for care for PPD. Holopainen (2002) reported that women had mixed feelings about taking medication for their illness. Although it helped some women to regain control of their lives and their ability to function, they also felt a great deal of shame about not being able to adjust to motherhood on their own. Mothers in this study also felt that family doctors were more willing to write a prescription than to engage in a discussion about the mothers' concerns (Holopainen, 2002).

2.2.2 Help seeking experiences. Studies to date have focused mainly on the pathway to treatment and help-seeking experiences rather than specifically focusing on experience with treatment. The Maternal Health Study, conducted in Australia, described the help-seeking behavior of mothers with depressive symptoms in the first 9 months postpartum (Woolhouse et al., 2009). In this study they noted that access to treatment for

PPD is dependent on women seeking help and accepting treatment for their symptoms. Shakespeare et al. (2006) noted that mothers were more likely to accept help from their existing HCP if they agreed with the diagnosis of PPD and their own views were in keeping with their HCP, based on previous encounters. General practitioners were typically the first choice (McIntosh, 1993). Kingston et al. (2014) conducted a telephone survey in Canada of 1207 random adults to determine public acceptability for perinatal mental health screening and treatment preference. The majority of respondents identified their family doctor as the first choice for help seeking and preferred treatment included speaking with a doctor or midwife and counselling (Kingston et al., 2014).

When prompted to do so, women cited various reasons for seeking help. Women who sought professional help did so only after their need for relief of their symptoms and daily function was impaired to an unacceptable degree – as a "last resort" (McIntosh, 1993). Mothers also described reaching a "crisis point" (McCarthy & McMahon, 2008) wherein they were unable to make the decision for themselves and they were strongly encouraged to seek help by their spouse, parents, friends or HCP (McCarthy & McMahon, 2008; Sword et al., 2008).

Several studies have noted, however, that women do not always seek help for symptoms of PPD (McCarthy & McMahon, 2008; Woolhouse et al., 2009). In some cases women did not know where to seek help (Holopainen, 2002; McCarthy & McMahon, 2008). Sword et al. (2008) and McCarthy and McMahon (2008) identified additional deterrents such as a limited understanding of PPD and fear of discussing mental health issues with others. Mothers also indicated they felt their symptoms would resolve on their own over time and were therefore not necessary to bring to the attention

of a HCP (McIntosh, 1993; Sword et al., 2008). Mothers identified a number of reasons related to their HCP why they did not seek treatment for PPD. Reasons included mothers not believing their HCP would be able to help (Woolhouse et al., 2009) or that mothers did not trust their HCP (McIntosh, 1993), highlighting the need for an established, supportive relationship between mother and HCP (Sword et al., 2008). Sword and colleagues (2008) also noted that women sometimes do not seek help because they feel they will be blamed for some of the social problems they face that contribute directly to their distress. Some of these problems may include lone parenting, low income, and lack of access to healthy foods.

One key reason why mothers did not seek help is that they did not realise they were ill. In a number of cases mothers were able to identify that there was something wrong, but they were not able to recognize their symptoms as PPD (Holopainen, 2002; McCarthy & McMahon, 2008; Sword et al., 2008; Woolhouse et al., 2009). In some cases, recognition by HCPs was poor as well (McCarthy & McMahon, 2008). Many mothers felt that PPD was more serious than how they were feeling (McCarthy & McMahon, 2008; Woolhouse et al., 2009), and that the way they were feeling was fairly predictable given the circumstances of recently having had a baby, getting very little sleep, and transitioning to motherhood (McCarthy & McMahon, 2008; Shakespeare et al., 2006; Sword et al., 2008; Woolhouse et al., 2009). Mothers had a tendency to minimize symptoms and assume they would be able to deal with them on their own (Sword et al., 2008; Woolhouse et al., 2009). Another reason mothers cited for not seeking help was because they were too embarrassed (McIntosh, 1993). They described a great deal of shame at not being able to cope with the transition to motherhood (Slade et al., 2010),

their inability to function within this new role (Holopainen, 2002; McCarthy & McMahon, 2008; Sword et al., 2008) fear of being labelled mentally ill and as an unfit mother (McIntosh, 1993), and therefore did not tell family, friends or HCPs how they were feeling (McCarthy & McMahon, 2008; Shakespeare et al., 2006).

In the study of 38 women experiencing symptoms of PPD up to nine months after having a baby examining the help seeking behavior and perceived causes of their symptoms, McIntosh (1993) noted that mothers' depression originated in social and economic difficulties in addition to difficulties associated with motherhood. Sword et al. (2008) examined "individual, social network, and health system" related help seeking experiences. Eighteen Canadian mothers were recruited to the study based on their EPDS score (Sword et al., 2008). They identified facilitators and barriers to seeking help at each of those levels. Normalising of symptoms was noted as a barrier at each level and limited understanding of PPD was noted at both the individual and social network levels. Results highlight the need for a coordinated system of care that includes education, outreach and appropriate follow up for all mothers (Sword et al., 2008). Perception and personal experience with mental health problems and treatment were noted by Kingston et al. (2014) to be significant barriers to obtaining mental health care. Limited availability and accessibility were noted as system related barriers (Kingston et al., 2014).

2.2.3 Primary care providers' perspectives of treatment. Limited information was found that focused on the perspective of the health professional in providing care for mothers with PPD. Several barriers to engaging mothers into treatment for depressive symptoms throughout that first year have been identified. Byatt et al. (2012) held focus groups with perinatal health professionals, the purpose of which was gather perspectives

on barriers and facilitators to treating perinatal depression. One barrier identified by providers is that they have limited knowledge of how to treat and manage PPD, and some did not see it as their role (Byatt et al., 2012). Service providers who work with lowincome mothers participated in focus groups to identify barriers to help seeking for lowincome mothers in a study by Abrams, Dornig & Curran (2009). They noted the difficulty of performing a proper assessment to differentiate between PPD and difficult life circumstances among the mothers they serve. Even if HCPs are successful in recognizing a mother's mental health issues, they are faced with a lack of options for care: too few mental health specialists available to see mothers in a timely manner (Byatt et al., 2012); no mental health resources onsite and lack of publicly funded options (Abrams et al., 2009). Perinatal health care providers would like to be able to offer a referral guide and educational resources to the mothers they see and provide them with opportunities for peer support to destigmatize PPD and empower women to seek treatment (Byatt et al., 2012). They also identified an interest in receiving additional training to improve their ability to diagnose and manage PPD.

HCP participants in a study by Boyd et al. (2011) described the supportive role of primary care. Sixteen community health workers participated on focus groups to help researchers gain a better understanding of the referral process to mental health providers for women with PPD. They identified that it is important for them to establish a supportive relationship with individual mothers and to normalize how mothers are feeling. Community health workers also identified several barriers in referring mothers to mental health providers in the postpartum period, including practical barriers, personal barriers, health system barriers, and stigma (Boyd et al., 2011).

2.3 Social determinants of health

Mothers who are economically disadvantaged by their life circumstances (e.g. neighbourhood poverty, lack of social support, limited access to resources) face additional challenges postpartum (Daoud et al., 2014; Kurtz Landy et al., 2009). Kurtz Landy et al. (2009) completed a qualitative descriptive inquiry of the lived experiences of socioeconomically disadvantaged women in Canada in the first four weeks postpartum. The study did not explicitly define "socioeconomically disadvantaged"; however it was understood to refer to low economic means and low maternal education. Mothers cited the "ongoing burden of their everyday lives," (p. 196) and "the ongoing struggles to adjust to changes that came with the baby's arrival" (Kurtz Landy et al., 2009, p. 196) during the postpartum period. Daoud et al. (2014) looked at patterns of inequalities in birth outcomes in a national cross-section study using 2006 Canadian Census data. Results suggest that mothers with lower income and education who were also living in poor neighbourhoods faced worse maternal and child health outcomes. Greater differences in outcomes between women with lower income and education and women with higher income and education for maternal and child health indicate there may be a cumulative effect seen across the lifespan for women living in challenging circumstances (Daoud et al., 2014).

Chronic life stress and economic challenges confer multiple risk factors likely to have cumulative effect on development of depressive symptoms during the postpartum period (Séaguin, Potvin, St-Denis & Loiselle, 1999; Benoit et al., 2006; Goyal et al., 2010). Changes in adaptive regulatory systems due to postpartum shifts with hormones may limit the resilience of a mother who is vulnerable due to prior history or current

stressors (Class et al, 2013). The harsh reality of these chronic stressors may overshadow a significant life event such as having a baby (Séaguin et al., 1999), interfering with their ability to rest and recover from childbearing, adjust to having a new baby, and to care for themselves (Kurtz Landy et al., 2009). Kurtz Landy et al. (2008) recommended that effective health and social services be developed to support socioeconomically disadvantaged women and their infants. Low income mothers who had experienced PPD within the past year participated in a study by Abrams et al. (2009) to examine use of mental health services. Data captured a picture of various social processes, including beliefs about motherhood, stigma, and parenting in stressful contexts, converging to create barriers to prompt assessment of symptoms for PPD (Abrams et al., 2009).

Although there has been some investigation of the SDOH and the incidence of PPD, little attention has been paid to their influence on the lived experience or recovery from PPD. The majority of studies to date investigated PPD as it relates to a particular social factor, rather than to look at all determinants of health together. The strongest evidence, by far, is that living with low income is associated with an increased risk of PPD (Abrams et al., 2009; Benoit et al., 2007; Goyal et al., 2010; Kurtz Landy et al., 2009; Segre et al., 2007). Segre et al. (2007) has noted that very low income women are often living without basic necessities such as food and shelter; the birth of a new baby may present an additional drain on already overburdened economic resources.

Low educational achievement showed the next highest association with PPD (Daoud et al., 2014; Goyal et al., 2010; Lanes et al., 2011; Segre et al., 2007). Individuals with lower educational attainment may experience great difficulty obtaining a well-paying job, and accessing appropriate health and social services, and are more likely to

experience PPD (Benoit et al., 2006). Maternal education reflects access to opportunities, knowledge and information, problem solving skills, social networks and involvement (Daoud et al., 2014). Also strongly associated with increased prevalence of PPD is a lack of social support, whether provided by health professionals, spouse, family, friends, or community (Dennis et al., 2012; Kurtz Landy et al., 2008; Kurtz Landy et al., 2009; Lanes et al., 2011). Dennis et al. (2012) noted in a cross-sectional analysis of provincial prevalence of PPD in Canada, that although risk factors for the development of PPD are high in Atlantic Canada, rates of PPD are not. Together with the knowledge that social support was indicated to be high in this area, results indicate that social support may act as an ameliorating factor in the development of PPD (Dennis et al., 2012). Séaguin et al. (1999) described different types of social support that may be helpful postpartum. Emotional support in the early postpartum period was found to be most significant in protecting against later depressive symptoms, whereas the need for information in the first few weeks after birth, if unmet, was closely associated with depressive symptoms in the short term (Séaguin et al., 1999).

Other factors that have been found to be associated with increased likelihood of experiencing PPD include self-reported health status and having a baby in a country other than where they were born (Kurtz Landy et al., 2008); occupation and employment status (Goyal et al., 2010; Lanes et al., 2011; Segre et al., 2007); ethnic minority status, including Latina and African American women (Abrams et al., 2009); marital status (Goyal et al., 2010; Kurtz Landy et al., 2009); and location either by region or rural status (Lanes et al., 2011; Price & Proctor, 2009). Only a small number of these studies investigated social influences using qualitative description and none of them specifically

addressed the influence of the SDOH on the experience of PPD or engagement in treatment

2.4 Summary

It was theorized that the SDOH have a direct impact on women's experience with treatment for PPD. A review of the literature related to this topic identified a gap in information related to the influence of treatment and the SDOH on the lived experience of PPD. This study begins to fill this gap as a means to evaluate personal experience with treatment for PPD in primary care and a targeted treatment program in the context of key socioeconomic conditions.

Application of a SEM, referring to the multiple and interacting levels of influence on a woman's life, (described on page 29) to the experience of PPD will help practitioners, mothers, and families to gain a better understanding of the various influences on PPD. A better understanding of these influences will help to inform changes in practices and policies to better support new mothers in treatment as well as to ensure that appropriate supports are available for moms in the community. It will also help to identify whether current programs and services are adequate.

CHAPTER 3 METHODOLOGY AND STUDY DESIGN

3.1 Research Question

This study examined the lived experience of PPD by answering the following research question:

How does participation in treatment influence the lived experience of women living with PPD?

3.2 Study Design

A qualitative approach is appropriate for the exploration of patients' experience with treatment for PPD. The researcher is free to explore areas of interest throughout the interview and is not constrained by a strictly defined set of questions. This approach was appropriate for this inquiry as it allowed participants to tell "their story" in their own words, providing them with the opportunity to emphasize important aspects of their experience or to disregard what they felt was not important. Data was collected in text form during semi-structured qualitative interviews with new mothers, HCP at RMHS, and FP (Appendix A, B & C). New mothers were also asked to complete a brief personal information survey (Appendix D) related to the SDOH. A survey is often used in descriptive research to collect demographic or background information about participants (Neuman, 2006). Although it is more commonly used in quantitative research, a survey can be used to complement the information obtained through qualitative research interviews by providing rich detail about participants. One of the benefits of using a structured questionnaire is that responses can be compared across all participants (DePoy & Gitlin, 1998).

In this study the information obtained from the personal information survey was used to categorize participants according to specific socioeconomic indicators.

Participants were asked to complete the survey at the beginning of the interview, allowing the researcher to probe for additional information as necessary. Responses from the survey were reviewed prior to and during the interview to allow the researcher to seek clarification. Following each interview the researcher was able to compare responses across participants. HCPs and FPs were not required to complete the personal information survey as part of their interview because their contribution to the study is related to their experience providing treatment to mothers with PPD and not with SDOH.

Participants' experiences with treatment for PPD, and HCPs and FPs' experiences with providing treatment were captured through a method of qualitative inquiry which allows the researcher to develop a rich description of their experience using the "everyday language" of the participants. *Qualitative descriptive inquiry* is the method of choice when straight-forward, minimally transformed, description of a phenomenon is desired (Asbjoern Neergaard, Olesen, Sand Andersen & Sondergaard, 2009; Rissanen, Kylma & Laukkanen, 2008; Sandelowski, 2000). It is a useful method to use in the exploration of a very specific, narrowly focused topic with an eye to understanding a particular experience set in the participants' personal context (Asbjoern Neergaard et al., 2009; Magilvy & Thomis, 2009). The researcher collects as much detail as possible from participants to provide an authentic and comprehensive summary of an event. Flexibility is maintained in data analysis to align closely with how those who lived the experience would make meaning of it.

3.3 Socioecological Model – theoretical perspective

A SEM offers a theoretical framework for understanding the dynamic interrelationships among persons, their community, and social and physical environment (Stokols, 1996). Application of this model provides a vivid description of an individual's experience based on the complex interaction between the individual and their environment (Visser, 2007) allowing for a detailed analysis of lives in context (Collins, Tapp & Pressley, 2010).

A person's social environment is sometimes described as being similar to a Russian nesting doll; each level is contained within the next (Bronfenbrenner, 1977). Events that occur in one level necessarily have an impact on the others. A person's experience cannot be fully understood through simple observation; in-depth understanding must include a careful examination of the relations occurring between levels of the model and within a changing environment. This includes a person's immediate setting as well as the larger social setting, including both formal and informal elements (Bronfenbrenner, 1977). This model has previously been used as a framework to study factors affecting health outcomes such as health promotion (McLeroy, Bibeau, Steckler & Glanz, 1988; Stokols, 1996), social marketing influences (Collins et al., 2010), factors contributing to obesity (Cassel, 2010), and efficacy of nutrition education (Gregson et al., 2001), among other topics. This model has also been used to study various aspects of women's experience with PPD. For example, Sword et al. (2008) used a socioecological framework to examine women's care seeking experiences following a referral for PPD; Abrams et al. (2009) explored individual, community, and provider level barriers at different stages during the help seeking process; and Byatt et al. (2012)

discovered patient-, provider-, and system-level barriers in their exploration of health care providers' perspectives on managing perinatal depression.

A four-level SEM (Figure 1) was initially used to examine the relationship between PPD, the influence of treatment for PPD and key socioeconomic factors. The SEM served as a lens through which the phenomenon of interest was viewed, defining what was important in the emerging results and helping to focus the study (Creswell, 2007). Interaction among levels was an important consideration in the understanding of how mothers were able to engage in treatment for PPD.

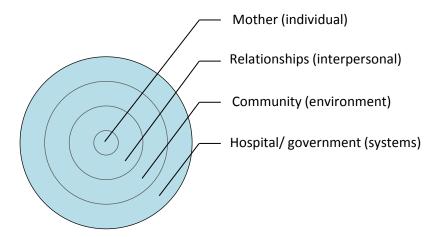


Figure 1. Socioecological model for the study of the experience of treatment for PPD. The individual level represents the patient receiving treatment for PPD; interpersonal level represents the relationship between the patient and her HCP; environment level represents multiple elements of society; and the systems level represents policy and decision makers at IWK and within the government of Nova Scotia.

In Figure 1, the *individual* may be a patient in the RMHS at IWK, with their FP, or other community program. Her experience cannot be removed from the therapeutic *relationship* with her primary care provider, nor can it be removed from socioeconomic elements in the *community* which determine her overall health and well-being. There is also considerable interaction between levels of the model as they pertain to social and

economic aspects of their lived experience. Programs and policies implemented by the *institution* and/or *policy decision makers* may in turn impede FPs' ability to provide adequate support to mothers with depressive symptoms due to their fee-for-service pay structure but may alternatively provide tremendous support in situations where the focus is on the provision of collaborative health care with other health professionals.

3.4 Research Methods

To present participants' information in a transparent and cohesive manner, it is important to use specific research methods which follow a logical pattern and outline the researcher's approach to collecting and analyzing data.

3.4.1 Participant Selection. In most cases it is not possible to investigate the lived experience of every person who has undergone a particular experience. In light of this many qualitative researchers find it useful to study a particular experience in depth rather than in breadth, meaning to study a small number of participants in greater detail rather than a large number in a superficial manner (Glesne, 2006). In this study detailed information about the phenomenon of interest was captured through in-depth individual interviews and detailed information about individuals through a personal information questionnaire and discussion of socioeconomic conditions as they related to the individual in question.

To be eligible for participation in this study, patient participants must have been diagnosed and received treatment for PPD within the past three years and have no mental health comorbidities. It would be difficult to discern experiences related specifically to treatment for PPD from her experiences related to another illness if a participant had been diagnosed with more than one mental health problem. Participants must also have been

female and able to speak and understand English. HCPs and FPs were required to have experience providing treatment to mothers with PPD.

Recruitment. Purposeful sampling is a strategy used in qualitative research where researchers specifically choose participants who have experience with the phenomenon of interest and are willing to contribute to the knowledge of the subject in detail (Creswell & Plano Clark, 2011). Patient participants in this study were recruited from patients who received treatment for PPD either at RMHS or from their FP. A form of maximum variation sampling was used, a type of purposeful sampling where participants are selected based on their experience with the topic of study and individual exposure to specific aspects of the phenomenon (Glesne, 2006). Initial recruitment of mothers as participants was limited to patients at RMHS. Patients were invited to participate by their HCP based on completion of treatment, lack of mental health related co-morbidities, and willingness to speak about their experiences with the researcher. HCPs were given a standard introduction to use when discussing the study with potential participants.

Several individual team members from RMHS were interviewed. In 2012-2013 when recruitment for the study was taking place, the team was comprised of three perinatal social workers, and two reproductive psychiatrists (IWK Health Centre, 2009), although in the past it has also included mental health nurse specialists, an addictions counsellor, a psychologist, and an occupational therapist. When beginning treatment, women are assigned to a particular provider (psychiatrist, social worker and/or nurse) based on the severity of their illness, previous history, and the context of their personal situation (J. MacDonald, personal communication, October 10, 2012). All staff were invited to participate in the study by the Principle Investigator (PI) during a team

meeting. Interviews with health care team members took place prior to those with patients. Feedback from staff indicated there were very few mothers currently in their practice who were eligible for recruitment. The majority of patients in the caseload at that time had either a more complex diagnosis than PPD or had a comorbid diagnosis, rendering them unsuitable for the study. Presence of an additional mental health condition would make it difficult for participants to isolate their experiences related to treatment for PPD. Only one mother from the then-current caseload was successfully recruited into the study, making additional recruitment strategies necessary.

Mothers who had been diagnosed with PPD and received treatment at RMHS within the past three years were sent a letter inviting them to participate in the study. Postcards were posted in the waiting area of RMHS, and given to mothers who had completed treatment. Recruitment posters were shared with and posted in the Perinatal Centre at IWK, and sent to FPs practicing obstetrics, asking them to post in their office. Advertisements inviting mothers to participate in the study were posted on the community and volunteer message boards on Kijiji (Bedford/Halifax/ Dartmouth/Cole Harbor). Recruitment posters were sent to doulas, midwives, and public health nurses practicing in Halifax, with the request that they share the information with their patients/clients. Recruitment posters were sent to family resource centres across Halifax, requesting that they be posted somewhere visible to new mothers, and requests for invitations to meet with new mother groups to introduce the study were also made. In most cases, several follow up emails or phone calls were required to obtain a response. Ultimately, six community groups or family resource centres allowed the PI to come speak with mothers to introduce them to the study and encourage them to participate.

During individual interviews, mothers were encouraged to share information about the study with other mothers who may have been interested in participating, a practice known as snowball sampling (Neuman, 2006).

Potential participants were encouraged to contact the PI directly, either by email or phone, at which time the PI discussed the aims of the study, expectations for participation, what information was to be collected, what was to be done with this information and the process for gaining participant consent. All potential patient participants were asked if they had completed treatment for PPD and were asked if they had other mental health concerns during this introductory conversation. Later in the recruitment process, mothers were asked to provide their level of education and income to ensure a minimum number of mothers in the low income/low education target group. In all cases the interview took place within one month of contact with the PI. Given the recruitment of patients treated for PPD in the community, FPs who treat mothers for PPD were recruited as well. Eight FPs, including a mix of those who practice either individually or in a collaborative practice, as recommended by a member of the research team, were sent a recruitment letter. Physicians were asked both to recommend patient participants to the study and to participate in the study as providers of treatment for PPD. In most cases, a follow up phone called was required to recruit participants and to schedule the interview.

Participants. It is a common strategy in qualitative research to gather as much detailed information as possible about and from participants to add to the broad understanding of the phenomenon of interest (Creswell, 2007). Three to ten subjects is a common suggestion for number of participants in a qualitative study (Creswell, 2007).

Efforts were made to recruit fourteen to twenty mothers for this study, with a minimum of seven participants representing each of the extremes in the combination of low to higher education and low to higher income. Unfortunately, recruitment of mothers with low education and low income proved extremely difficult.

Particular attention was given to a low level of education and lower income of the participants as these two factors have been shown to have the strongest association with PPD (Benoit et al., 2006). Data collection ended after fourteen interviews with new mothers, as similar patterns were emerging from the data – indicating saturation, and because options for recruiting mothers with low income and educational attainment had been exhausted. Low education was defined as achievement of a high school diploma or less. A higher level of education was defined as any completed education beyond a high school diploma. The low income cut-off (LICO) as defined by Statistics Canada was used to define low income. The LICO represents "an income threshold below which a family will [be required] to devote a larger share of its income on the necessities of food, shelter and clothing than the average family (Statistics Canada, 2012b)." This figure varies by family size, community and region across Canada. The 2011 LICO (Table 1) was used to determine which participants fell into the low income category. The median household income in Nova Scotia (2010), including all census families, was \$64,100 (Statistics Canada, 2012c). Participants whose household earnings fell into the category of \$60,000 to \$69,999 and above (as reported by participants on the personal information survey, Appendix D) were included in the higher income category for the purposes of this study (Table 1). Data collection continued with patient participants until no new themes emerged. Data saturation occurs when no new ideas emerge from additional interviews.

Specific recruitment of patient participants representing the low income/education category continued until all reasonable recruitment options were employed.

Table 1	
Low-income Cut-off, before tax	
People living in the home	Annual Household Income
	(before tax)
1 person	\$20,065
2-4 people	\$37,283
5 or more people	\$53,097

(Adapted from Statistics Canada, 2012d)

3.4.2 Data Collection. Data were collected in the form of a personal information survey, completed by patient participants, and via semi-structured interviews with all participants, conducted by the PI. The survey and interviews took place in a setting where both the interviewer and interviewee were able to discuss topics in detail with a reasonable level of privacy and limited distractions. Locations included the participant's home, office, coffee shop, and community centre. Patient participants completed the personal information survey before the interview began. Responses to this survey helped to inform the researcher's understanding of the socioecological influences in their lives and in some cases were reviewed during the interview for clarification by the participant.

Measures. An indicator is a qualitative or quantitative measure that captures an individual's position relative to a certain outcome; one example would be a key dimension of health (CIHI, 2012). These dimensions of health could include any of the individual SDOH as outlined in the model by Raphael and Mikkonen (2011): income and income distribution; level of educational attainment; unemployment and job security; employment and working conditions; early childhood development; food security; housing; social exclusion; social safety network; access to health services; aboriginal status; gender; race; and disability. The Canadian Community Health Survey – annual

component - 2011 (Statistics Canada, 2012a) and the National Household Survey 2011 (Statistics Canada, 2010) were adapted for use in this study to collect information from participants regarding their individual indicators of the determinants of health. Patient participants completed the Personal Information Survey (Appendix D) prior to their interview. Responses to the demographic survey helped to inform the researcher where participants "fit" in relation to the SDOH (D Raphael, personal communication August 31, 2012) and collectively serve as a measure of *indicators* of their health.

Participant responses help to answer the research question by providing a context for individuals with personal experience with treatment for PPD. Prior to the study it was unknown what sort of influence the participants' social context would have on their experience with treatment for PPD, however, it was anticipated that they would affect the mothers' ability to participate fully in treatment. The questions in the survey were adapted to reflect the SDOH most commonly associated with PPD according to a review of relevant literature. A question was added related to childhood adversity and trauma based on the expertise of one of the thesis committee members, who shared that for some women the inherent vulnerability of childbirth may recall previous feelings of childhood adversity or unresolved trauma, making it difficult for her to adjust to her new role as a mother (J. MacDonald, personal communication, January 8, 2013).

Interviews. It was important during the interview to establish rapport between the PI and participant to ensure the participant feels comfortable sharing some possibly difficult experiences with PPD or with their experience providing treatment for PPD. Questions were open-ended, allowing the participant to respond fully. The researcher played an active role, reflecting and guiding the participant through her thoughts and

attitudes toward the experience, while remaining open to unanticipated perceptions and experiences raised by the participant (Ritchie et al., 2003). The researcher used gentle probing and follow-up questions to draw further information from the participant.

The PI began each interview with a brief introduction encouraging the participant to feel comfortable and take their time responding to questions throughout the course of the interview. During interviews with mothers, if their baby was present they were encouraged to take care of his/her needs as required. A standard interview guide (Appendix A) was developed based on the research question and specific topics of interest in the study, in consultation with a thesis supervisory committee which included a FP, psychiatrist and PhD-prepared, mixed methods, health services researcher. A similar format was used with HCP and FP interviews. Additional guides were developed for use during interviews with each of these groups of participants (Appendix B & C). The specific guide formed the basis of each interview, allowing sufficient flexibility to provide the PI the opportunity to question and expand on a related but unanticipated topic.

Each interview was digitally recorded. Prior to beginning the interview, the PI reminded participants that participation was entirely voluntary and had them complete a form documenting consent for participation (Appendix E, F & G). Following each interview, the audio recording was transcribed by the PI. Participants were asked to also provide consent to being contacted for follow-up questions or clarification should the need arise. Patient participants were provided with a list of community resources as part of the interview and were encouraged to contact their HCP following the interview if they felt distressed.

Use of Qualitative Software. All interviews were transcribed by the PI, using a consistent protocol for managing transcripts (Appendix H). Transcripts were stored, organized, and analysed using qualitative software NVivo 11 Starter for Windows (QSR International 2015, Version 11).

3.4.3 Establishing Rigour and Trustworthiness. Applying rigour to qualitative analysis is a systematic, deliberate approach to producing data whereby all decisions regarding analysis are rendered transparent. The result is high quality research presented in a clear and simple manner. Careful field notes were taken after each interview to capture additional details and to note any preliminary thoughts on analytic themes. The researcher also reviewed each transcript to monitor objectivity. Additional notes or memos were written to track changes in thoughts around themes and codes. All interviews were transcribed verbatim and a thematic codebook was used during data analysis to ensure codes were applied consistently throughout the process.

Qualitative researchers may depend on multiple methods for gathering data, ensuring that the topic of study is examined from multiple perspectives, thus contributing to the "trustworthiness of data" (Glesne, 2006), the idea that the information gathered accurately represents the participants' perspective. Inclusion of interviews with several members of the health care team from RMHS and FPs providing care to mothers in the community, in addition to patients who have completed treatment for PPD, resulted in information-rich data, allowing for a more in-depth study of the phenomenon from multiple perspectives. Although they were not involved directly in the interview and analysis process members of the research team reviewed progress of the study throughout

to ensure congruence between the data generated during interviews and the topic of study and during development and application of the analytic framework.

3.4.4 Situate the researcher/reflexivity. The PI of this project is a student at Dalhousie University in the Master of Applied Health Services Research program. This research will be used to fulfill the thesis requirement of this degree. Research questions originated from the PI's own experience as a patient in RMHS, wondering how the treatment they provided was evaluated and looking for a way to support other women in their struggle with PPD. This graduate student has extensive experience working in the health care system in Nova Scotia and previous experience in evaluation of educational programs and services. The PI also has experience working as a research assistant in a qualitative research study (constructivist grounded theory). Responsibilities included recruitment, conducting participant interviews and data analysis.

3.5 Data analysis

Once data is collected, it is important to organise the information so that it provides an accurate and logical representation of what participants had to say.

3.5.1 Thematic analysis. A key feature of qualitative data analysis is the coding process (Creswell & Plano Clark, 2011). Coding is the process of recognizing patterns in the data so that it can be organized into increasingly broader ideas (themes). Identifying themes within the context of how it occurred allows the researcher to develop an accurate description of a particular experience or phenomenon experienced by a small number of people to a more general description of others who also experienced that phenomenon (Neuman, 2006).

Participant transcripts (data) were read and reread to become familiar with the data and develop a general understanding of what participants were trying to say. Initial thoughts on codes were captured in field notes as data was being collected and in memos during data analysis. Data were analysed thematically by a single coder (PI) using an inductive and deductive coding method. Inductive codes emerged from the data, reflecting issues of particular importance to the participants (Hennink, Hutter & Bailey, 2011). Deductive codes were identified a priori in response to the research question. Together, inductive and deductive codes were organized into themes, which provided a rich description of mothers' experience of treatment for PPD. The PI's supervisory committee also reviewed transcripts and made suggestions for coding. Committee members provided varied perspectives, including a FP who cares for women and children in her practice; a psychiatrist who has treated many women with PPD; and a PhDprepared family medicine researcher who does not have children. These perspectives assisted the PI in considering multiple points of view in composing and refining analytic themes.

3.5.2 Participant description. Responses to the personal information survey were analysed separately from the qualitative interviews. Preliminary results were monitored throughout to ensure that the sample was broad enough to capture individuals from a range of social factors. The purpose of the description was to generate a snapshot of the women participating in the study and to provide data that is complementary to the qualitative data obtained during interviews. This information illustrated the similarities and differences between groups and provided a more complete picture of the personal information of participants as a whole. The two types of data collected were brought

together in the interpretation of the results to supplement and clarify emergent themes.

Personal information was reviewed on an individual basis to provide additional context to mother's responses.

3.6 Ethical Considerations

All research involving humans is subject to review and approval by the Research Ethics Board (REB) governing the site where the research is being conducted. IWK REB provided approval and oversight of this study.

3.6.1 Risks and Benefits. Taking part in this study may have been of no direct benefit to participants, other than to feel more comfortable and confident in sharing their experiences with others. The main benefit resulting from this study was increased knowledge about women's experiences with treatment for PPD and how the SDOH may have influenced those experiences. This knowledge may help women and their families who are struggling with PPD in the future. Gaining information from mothers about what influenced their experience with treatment may provide HCPs with a better understanding of what patients need to ensure a positive experience with treatment for PPD. It may also be helpful to decision makers when making policy recommendations and developing supportive programs.

The greatest risk to patient participants was the likelihood of emotional distress related to the memory of when they were unwell and struggling with the adjustment to motherhood. All participants were encouraged to contact their HCP following the interview if they experienced significant distress. An additional risk of harm to patients was the possibility that private information including their participation in the study and experience with PPD could inadvertently have been shared with others.

Given the highly personal and sensitive nature of this study, it was appropriate to conduct follow-up interviews with participants to allow for clarification of some topics or to probe for further information on sensitive issues that arose during the interview. A request for the opportunity to follow-up with participants following the initial interview was included in the discussion of the consent form. Participants were also given the option to receive a copy of their transcript and/or the results of the study upon completion.

Due to the potential risks stated above, one challenge faced by the researcher was the willingness of mothers to speak with a researcher about their experiences with PPD. For some women it was very difficult for them to share their illness with others as it is heavily laden with a negative perception and lack of understanding within society. Participants were assured that participation was voluntary and they were free to withdraw from the study at any time. Protocol used to maintain patient confidentiality was reviewed with participants during the consent process prior to any interview questions being asked. They were encouraged to speak with their HCP following their interview and provided with a list of community resources to call upon should they feel distressed.

Related to the potential risks inherent in this study, it was important to consider the power dynamic that could result between the PI and the mothers as research participants. One example of this was that participants may not have been comfortable providing what could be perceived as negative information about their experience. The participant may have wondered if the information she provided could have an impact on the care she receives at the health centre or from the RMHS in the future resulting in mothers potentially not being forthcoming about their experience with treatment. This

information may have included her relationship with her HCP; her overall experience; or her perception of the quality of the care she received. Patients were assured during the consent process with the PI that their decision to participate or not and what they had to share with the researcher would not be shared with others, nor impact the care they receive at IWK or from their FP in any way.

It may also have been difficult to disclose such personal information with the researcher. Given the PI's personal experience with this illness, she was in a unique position to understand the discomfort this sharing may have caused and to alleviate the distress that may have been felt by each participant. This was achieved by creating an empathic tone in the interview, ensuring participants that everything they said was valuable and accepted without judgment.

There was a risk of harm to staff participants and FPs as well, the greatest of which was the potential distress at providing information about their employment and/or role that may be construed as negative, as well as the potential for this information to inadvertently become known to their employer. An additional potential risk was in feeling distress and frustration in their (in)ability to provide effective treatment to all mothers in their care. HCPs and FPs were assured by the researcher that their participation and the information they provided would remain confidential.

Compensation. All patient participants received a gift card to a local grocery store, valued at \$20, as a thank you for their participation.

3.6.2 Data Storage and Handling. Anonymity of participants was maintained at all times. Each interview was digitally recorded and transcribed. Any identifying characteristics were removed and each transcript was assigned a unique study ID

(Appendix H). Hard copy files were kept in a locked cabinet in the PI's office, Dalhousie University. Digital files were stored on a password protected hard drive, with each individual file requiring a separate password, accessible by the PI only. Members of the research team received copies of transcripts and had access to consent forms and identification of participants if required. All files will be destroyed five years after any academic writing and/or publication.

3.6.3 Informed Consent. The PI was responsible for obtaining consent from participants. Participants were assured their responses would be kept confidential and would in no way influence any further treatment they received, at IWK, from their FP, or in the community. As part of this process, participants were asked to provide permission for the use of quotations in any academic writing and/or presentation based on this research. In these quotations, participants were identified by an abbreviated form of their study ID.

3.6.4 Approval. Ethics approval was obtained on August 20, 2013 from the IWK REB prior to participant recruitment. Amendments related to difficulties in recruitment of new mother participants were accepted February 3, 2014; July 31, 2014; December 22, 2014; and March 30, 2015. Annual approval was received August 20, 2014, August 20, 2015 and August 20, 2016.

3.7 Knowledge Translation and Dissemination of Results

The overall goal for knowledge translation (KT) is to ensure that information (research results) is shared with others in such a way that it can be understood and used by others. There were two key areas of KT planning for this project. The first was a form of integrated KT where potential knowledge users (HCPs in RMHS) were engaged prior to

the beginning of the research project. They were asked for topics of interest which could serve as a research project for a masters-level student. Their interest in gaining a better understanding of women's experience with treatment was supported by the results of a literature review which indicated a paucity of available research specifically related to patients' experience with treatment for PPD and the influence on such by the SDOH. The second part of the KT plan includes dissemination of results and identification of additional knowledge users. Results of the study will be presented to staff members of RMHS, FPs, obstetricians, and other HCPs who provide care to mothers postpartum. Recommendations for policy, programming and/or additional supports drawn from the findings will be presented to RMHS and others as appropriate. This work may be submitted for presentation at appropriate national and local conferences and published in peer-reviewed literature, subject to funding. The research methods for this project have been presented at the Qualitative Health Research Conference (October 2013) and the Integrated Health Research Training Program Graduate Student Research Day (May 2014). A summary of research results will be shared with all participants who have requested one.

CHAPTER 4 FINDINGS

4.1 Mothers' journey through postpartum depression

Fourteen mothers who had received treatment for PPD were interviewed to learn more about their experience with treatment. All women had completed treatment within the previous three years of being interviewed. Nine mothers participated in treatment at RMHS, two of whom also received ongoing care from their FP; four mothers were treated by their FP; and one mother saw a private counsellor for treatment.

All new mother participants completed a personal information survey as part of their participation in the study. The purpose of the survey was to capture the subjective physical, social, and emotional wellbeing related to mothers' socioeconomic conditions. A summary of results of the survey can be found in Table 2.

The majority of mothers self-reported their health as excellent to very good. One mother reported her health as poor. Mothers ranged in age from 27 to 40 years old. Ten women were married; two living common-law; and two were separated from their partners. The number of children each mother had ranged from one to three. All women self-identified as white, non-aboriginal, Canadian citizens, one of whom was born outside of Canada. Three women spoke English and French well enough to have a conversation while the remaining women spoke only English. Level of education completed and household income are discussed in more detail below (Figure 2). Main sources of household income included wages and salaries (11 mothers); income from self-employment (2 mothers); employment insurance (2 mothers); provincial or municipal social assistance or welfare (2 mothers); and child tax benefits (1 mother). Three mothers were unemployed; one self-employed; nine employed; one identified as a stay at home

Table 2. Abbreviated summary of personal information survey		
Indicator	Survey results	New mothers
Health status	Excellent	4
	Very good	4
	Good	5
	Poor	1
Age (in years)	27-40 (average 31)	
Marital status	Married	10
	Common-law	2
	Separated	2
Children	1-3	
Canadian citizen	14	
Born in Canada	13	
Level of Education	Lower	2
	Higher	12
Source of income	Social assistance	2
Household income	Lower	5
	Higher	9
Employee benefit recipient	Yes	8
Significant childhood memory	Yes	11
Person to talk to about decisions	Strongly agree/agree	13
	Disagree	1
Person I trust with problems	Strongly agree	12
	Agree	2
Strong emotional bond with at least 1 person	Strongly agree/agree	13
	Disagree	1

^{*}See Appendix D for complete version of personal information survey; Adapted from Canadian Community Health Survey (Statistics Canada, 2012a)

mother; and one as a student. Seven mothers received benefits from either their own employer or their spouses, three did not. Six mothers find their job a bit stressful; three not very stressful; and three quite a bit stressful. Eight mothers expected a change in their employment situation in the next 12 months following their interview. Examples included returning to full time work; changing to part time work; maternity leave; beginning a new career; becoming a stay at home mother; changing jobs as their current assignment was

over; and becoming self-employed. The majority of mothers indicated they were satisfied or very satisfied with their housing and their neighbourhood. One mother was dissatisfied with her housing situation, and one was neither satisfied nor dissatisfied. The number of people living at the same address ranged from two to seven. Eleven participants owned their own home, with three paying rent. Eleven mothers indicated they lived in a house, two in an apartment, and one in a condominium. Most mothers indicated they always had enough of the kinds of food they wanted to eat in the last twelve months; two mothers did not always have enough of the kinds of food they wanted to eat; one mother sometimes did not have enough food for her family to eat; and one mother reported that she and her family often did not have enough to eat. Mothers were also asked to describe their social supports. Thirteen mothers felt they had a strong or somewhat strong sense of belonging in their community. One mother felt her sense of belonging was somewhat weak. Thirteen mothers agreed or strongly agreed that they have someone they could talk to about important decisions in their life; one mother disagreed. All mothers agreed or strongly agreed they were in a relationship where their talents and skills were recognised. If they were having problems, twelve mothers strongly agreed they have a trustworthy person in their lives they could turn to for advice; one mother agreed, and another mother disagreed. Four women agreed they have a strong emotional bond with at least one other person and ten mothers strongly agreed. Ten mothers indicated remembering something that happened to them as a child or teenager that was so significant (e.g., scary, painful, happy) that they thought about it for years after (discussed further in Chapter 5, page 117).

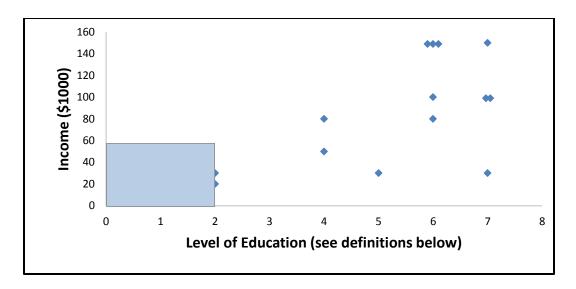


Figure 2. Comparison of participants' level of education and income. Colored box indicates area of low education and low income. (1-less than high school diploma or its equivalent; 2-high school diploma or equivalency certificate; 3- Trade certificate or diploma; 4- College, CEGEP or other non-university certificate or diploma; 5- University certificate or diploma below the bachelor's level; 6- Bachelor's degree (e.g. B.A., B.Sc., LL.B.); 7- University certificate, diploma or degree above the bachelor's level).

As part of the survey, mothers were also asked to provide their highest level of education achieved as well as household income. Low educational attainment and low income are the SDOH most commonly associated with PPD. A comparison of all participants' income and education is presented in Figure 2. Two mothers reported a combination of low income and low education and nine mothers reported higher income and higher education. Three mothers did not clearly fit into either group, having achieved a high level of education but collected a low income. Lower income was defined as an income of \$59,999 and below; lower education was defined as having achieved a high school diploma or equivalency, or less.

Seven themes emerged during analysis, as presented in Table 3. Themes provide further insight into how mothers experience treatment for PPD.

4.1.1 Being ill. Many illnesses, including PPD, present with specific

Table 3. Mothers' journey through PPD

Themes	Description
Being ill	-how they felt; symptoms of PPD
Challenges	-things that made their lives difficult as a new mother
Expectations	-what they thought would happen
Pathway to care	-accessing treatment for PPD
Feeling better	-feeling better after treatment for PPD
Stigma	-shame felt by mothers experiencing PPD
Advice for others	-suggestions for new mothers, family and friends of new mothers,
	health care providers, and policy and decision makers

characteristics (symptoms) that collectively point to a specific diagnosis. Mothers described various symptoms associated with PPD, and a sense of not feeling like their usual self in the days and weeks after their baby was born. Although they were not sure why they were feeling as they were, many mothers were fairly quick to attribute it to something other than PPD.

I think I didn't know yet the extent of how things were for me. And I didn't know yet about being depressed, if it was postpartum, being depressed, and what was a normal amount of struggling for any new mom. (NM8)

Several mothers did question whether they might have PPD, but for various reasons, decided they did not. Some of their reasons included feeling bonded with their baby, and their ability to function in their everyday lives. One mother assumed she did not have PPD because her symptoms felt different than at other times in her life, "I'm still sad but it's a very different, overwhelming, anxious, sad. It's not the same sadness that I have when I'm just reg- like, [air quotes] regularly depressed (NM10)." Another mother seemed to suspect that might be what was wrong, but felt she did not fit the descriptions she read on the internet. "I knew I wasn't right, but- and I must have known because I kept looking up, am I depressed, am I anxious, but because I didn't fit these online things that I had seen, then I must not- I don't fit the 7-point checklist so obviously I'm just a

new mom (NM4)." Mothers reported not only feeling very low, which is commonly associated with depression, but also quite irritable and easy to anger, which they did not readily attribute to experiencing depression.

Many mothers reported feeling overwhelmed after their baby was born. They felt unable to make meals for themselves and their family, to clean the house, and to take care of their new baby. Mothers mentioned the complexity and amount of information that is "thrown" at them. Whether it was related to sleep, feeding, or soothing the baby, the information received was sometimes conflicting and contributed to mothers' feelings of inadequacy in caring for their baby.

... it seemed too, like, in the hospital I was getting, not only random advice from every shift change on how to feed the baby, but also the doula was coming in and giving me advice. And then my friends were calling with different things. It was just overwhelming. ... I was like, I can't handle this. (NM4)

Several mothers recalled feeling very isolated, stuck at home with a baby. In some cases this was a choice of not wanting to interact with other people; mothers may have felt unable to leave the house because they were so ill; or this may have been because of not wanting to interfere with their baby's routine. Mothers were very emotional when describing their loneliness. "I just wanted to feel like I was being hugged. I wanted that sense of somebody give me a hug, somebody friggin rescue me from this deep sadness (NM5)."

When a mother feels differently than how society expects her to feel during the postpartum period, she may feel very ashamed. NM10 described feeling guilty because she and her partner had tried to get pregnant for years before her baby was born, "... and then, like, I work with kids, and I couldn't function with him. And he was crying all the time, and I was crying all the time and I didn't even wanna be around him." Another

mother would stay awake during the night replaying her interactions with her baby throughout the previous day. "I would feel bad about getting frustrated with him during the day, or being cranky, or just taking care of his basic needs but not being fun, or not cuddling enough, or all the shoulda, coulda, woulda's (NM1)."

Many mothers wonder occasionally if they are doing the right thing when they make decisions about their children's care. Several mothers who participated in this study, however, were plagued with self-doubt about all aspects of their children's care, continuing to second-guess themselves long past the actual decision being made. Mothers talked about questioning whether they read them enough books; did they participate in enough activities; are they in too many activities? NM6 even questioned why she ever wanted to be a mom.

I wasn't pumping overnight anymore, but during the day, because she – my daughter would only sleep for 20 minutes, so by the time I got her to sleep, I pumped, I washed the equipment, she would be waking up again, and crying. So there was no time to do anything. No downtime, no time to eat, shower, unless someone was there. After months of that I got to the point where I was just thinking, why was this a good idea. Why did I think I wanted to be a mom, this is the worst decision ever. I'm used to being good at my job and now I'm at home, and things aren't working out. (NM6)

Motherhood is often associated with feelings of love at first sight and almost instant devotion to your baby; however, mothers do not always feel this way. Participants spoke about how their experience didn't live up to their expections. Participants recalled feeling withdrawn and empty – like they were just "going through the motions (NM1)" or that they had "no emotions (NM12)". NM3 described feeling as if her son was "someone else's kid ...I couldn't wait to hand off my child to somebody else. If there was anyone else around, I was just kind of, here you go." Mothers spoke about being unable to show

others how they were truly feeling. They talked about not knowing how to care for their new baby and were struggling with the transition to motherhood. Mothers provided examples of how they would keep these feelings to themselves when interacting with other moms and pretending that they knew what they were doing and that they were enjoying motherhood. "We did tons of great stuff and they were having a spectacular life. But I was always feeling like I'm just hanging on by a thread. Once the lights went down and they finally, everybody went to sleep at night, I was a mess (NM5)."

While they were struggling with PPD mothers were not doing anything for themselves, in some cases not even taking care of their own basic needs. Many mothers provided the example that they were either not eating, or they were not eating very healthy food – just grabbing snacks throughout the day instead of making themselves a meal. Another example of mothers not taking care of themselves was not bothering to shower or get dressed.

4.1.2 Challenges. Participants described their early days with a newborn using words like stressful, exhausting, sore, hazy, and rough. Sleep was cited as one of the biggest challenges mothers faced during the postpartum period. Many felt it contributed directly to their experience with PPD. They described sleeping with a baby tucked into the crook of their arm; waking multiple times each night and soothing baby back to sleep; and wearing their baby for hours at a time to encourage their baby to sleep. One mother described her experience as living through a "nightmare" (NM2).

Closely related to sleep, several mothers suspected that their baby's temperament contributed to their PPD. Temperament refers to a baby's natural response to their

environment. It can be seen, for example, in the intensity of their responses and how easy they are to soothe when upset. Several mothers commented that their babies were very difficult to soothe and some cried constantly. "She just was really fussy. ... I'm doing everything in the book and the doctors are telling me to do, and nothing's working, so why are you still crying (NM6)." The need to be soothing their baby constantly limited the opportunity for mothers to sleep. Mothers noted that exhaustion coupled with the sense of helplessness at not being able to soothe their baby made them really question themselves and whether they were a good mother.

Breastfeeding was a key contributor to the development of PPD for some mothers. Many mothers felt like they were breastfeeding all the time, increasing their fatigue and sense of isolation. Even for those mothers who were able to breastfeed, it did not necessarily come naturally to them; many of the mothers endured quite a lot of pain and distress before breastfeeding became easier. "I felt terrible ... I was having a terrible time with that and [name] and his mom were both kind of like, it just comes naturally, but I was in pain. It was really painful. I was bleeding, it was dry, it was just so—it was hard, it was so hard (NM9)." Several of the mothers who participated in the study were keen to breastfeed but found themselves either unable, or that it was very difficult for them. The inability to breastfeed made mothers feel as if they were unable to provide for their babies in the way they were either led to believe was the best way to do it, or in the manner they wished to feed their baby.

... when I couldn't do it, and when my body couldn't provide for my child, I became very upset. I don't know if it was just that good moms breastfeed and all of a sudden I couldn't be that good mom, that I put this pressure on myself that I would never put on anyone else. I have friends who formula fed because they chose to and they couldn't and I 100% supported them so I don't know why I didn't give myself that same permission. (NM4)

Another factor that contributed to mothers' PPD was a perceived lack of support. This could include practical support such as making meals or cleaning the house, or it could include emotional support, such as spending time with her so that she did not feel quite so alone. Mothers commented that they primarily looked to their spouse, their mother and their mother-in-law for support.

I felt he was so unsupportive. I felt like he, without ever saying, that if I didn't straighten up he was gonna call social services or something. ... That I was gonna need to be hospitalized. Because I was just not coping well. And I would say to him, it's because I'm tired [Name], it's because I'm tired. ... I feel cheated that I didn't have a supportive spouse. Because I think I could have been even happier if I had had that support. I think that's the number one, well sleep, I was lacking sleep, and we were lacking money. But I think you can overcome a lot when you feel like you're really intimately connected with your partner [crying]. (NM5)

Lack of support was also experienced by some participants as being offered "help" that wasn't what she needed. NM8 described accepting a meal at her parents' house when her husband was out of town.

My mom and dad ... would call every now and then, and if they invited us over for a meal or something, they'd say come over for dinner maybe once every 2 months or something. ... there was this unbelievable amount of work in order for me to accept this meal. ... Then my son, [Name] would be- his schedule would be all thrown off. He wouldn't go to sleep at all and the whole next day would be a mess for me. Just to say- so they would feel better to say that they've made methey've made supper for us or had us over for supper. It just wasn't helpful actually, when it all comes down to it. (NM8)

Another example of lack of support is denying mothers' experience – telling a new mother that every mother has a hard time. This could lead her to believe that these challenges are a normal part of motherhood and that they will go away on their own, rather than identifying their challenges as symptoms of PPD - an illness that can be treated. One mother provided the example that her husband actively discouraged her from

seeking help, first with breastfeeding, and then for her depression. "...it wasn't good. He told me basically, you're being selfish and counselling is stupid and it doesn't work ... I think that it's stupid for you to take our son there (NM9)."

Mothers described getting out of the house and transportation as a challenge which contributed to their PPD. The challenge of getting out of the house was specifically related to getting herself and her baby organised to leave the house at a certain time and also the worry about taking her baby outside. For women who travelled by bus, taking extra time for these activities could mean the difference between her getting to an appointment, or staying at home. Several mothers noted that their mood deteriorated when they did not leave the house, however, it was challenging at times to get out of the house due to their baby's nap schedule, or refusal to nap; weather that made it unpleasant to be outside; not living in a walkable neighbourhood; worries about their baby getting sick; or being strongly discouraged by their family.

Childcare was named as a challenge primarily for participating in treatment.

Although mothers were able to bring their children to their therapy session, the majority of women did not feel comfortable with this option, or knew that they could participate more fully when they did not have to split their attention between their therapy and their child. Several mothers were limited in finding care for their children in that they did not know of anyone, or that they felt they could not afford it.

It was difficult for some mothers to be able to afford all the things they needed during pregnancy and/or the postpartum period. One example was the dispensing fee for monthly prescriptions needed to treat their PPD. Although only writing a prescription for one month at a time may be a way to ensure a patient continues to come to appointments,

it may also serve as a financial barrier for mothers of low economic means. Mothers also cited the cost of formula as a financial stressor; travel to and from appointments; as well as the cost of an apartment that was large enough for the whole family, located in a safe neighbourhood where mothers felt safe to take their babies out during the day or evening.

4.1.3 Expectations. Many women have very specific expectations about what motherhood should be like and hold themselves and the people around them to this standard after the baby is born, regardless of their situation. Her husband, family and friends may have ideas about motherhood that differ from the mother's ideas. Each of these expectations, whether they are held consciously or not, may contribute to how a mother feels about what kind of mother she is, good or bad. Many of the mothers who participated in the study described the influence of these varying expectations on their mood and self-perception during postpartum, particularly when expectations were not met.

In childbirth, there are many possible medical outcomes and just as many expectations that women may have prior to giving birth. For many women this experience is a badge of honor, to be compared to every other difficult thing they attempt for the rest of their lives. For other women, it may also remain with them because of the associated challenges. Some mothers continue to compare the reality of their experience with the one they wanted for a long time after the birth of their baby. The most common complaint from mothers about their birth experience is that it did not go as planned, whether they consciously knew what they wanted or not. The process of childbirth for some women resulted in physical injury. Mothers talked about their c-section scars,

stitches to heal vaginal tearing, swelling, and more. For some of these women, physical impairment following childbirth contributed to their sense of failure post-delivery.

Mothers in this study shared that motherhood was more difficult than they expected. "I think that's the worst, like, you feel like you failed when, even like, with [Name], I wanted a baby so bad ... Once I had a baby it was like, you know, why did I have a baby, why did I do this? I made a mistake, this is horrible ... (NM7)." Some women found motherhood difficult because of their perception of the perfect mother, and their comparison of themselves to that picture in their head. Mothers also have high expectations of what they will be able to do following the birth of a baby. They may not anticipate any difficulties adjusting to life with a baby, and therefore set a very high standard for themselves to meet. If a mother is unable to meet her own standards, it can contribute negatively to her self-perception in her new role. NM6 described the first few weeks after she became a mother as, "Exhausting ... stressful ... I think I just had a lot of expectations of myself, so to do everything, get back to life (NM6)." Other women noted they were simply unprepared for motherhood.

I don't think I realized how exhausting it would be ... this constant, up every 20 minutes for 3 months straight trying to soothe someone who's inconsolable. And with support, I had my mother there to help out, but I don't think I was prepared for how draining and exhausting it would be. (NM6)

Commonly associated with motherhood is an instant bond with your baby and an overwhelming sense of peace and love, but this is not always the case. Another common assumption about motherhood is that women will naturally be good at it and won't need any help or guidance. One mother explained, "I had expectations of myself, what I thought I was capable of and what I wanted to be able to do (NM6)." Mothers may also

expect that they should be able to do everything on her own and get back to normal quickly after a baby is born, putting immense pressure on themselves.

A few times, right after he was born, I hired a cleaner to come in, and I remember feeling so embarrassed, that I needed to hire a cleaner, because I felt like I should have been able to do all this. And I was apologetic every time they came. They came every 2 weeks, and that only lasted about 6 weeks, and finally I stopped because I was too embarrassed. That why could I not do this? I look back, and think, my god, I was so hard on myself. And my expectations were completely unrealistic. (NM5)

Some mothers did not believe that they were sick and tried to work through it on their own, denying themselves and their families much needed mental health care. "I still think I thought it was something that I, if I tried harder, I would be able to stop it ... I think it was, you know, a combination of pride, not necessarily wanting to acknowledge it, thinking if I just worked hard enough ... (NM4)."

Mothers sometimes assumed that their partners, family, and friends would provide a certain amount or kind of support that was not realised after their baby was born. Several mothers were very upset when they did not get the help they needed, whether it was practical or emotional support. "I expected everything to just stop, because I thought I was dying. I thought everyone would just stop and rally around me and it didn't happen (NM2)." NM9 felt extremely hurt and let down that her mother was not able to help her. "... I had no support from her. Within the first month. So that was kinda- that was weird to me, I thought my mom would play a bigger role in helping me cause I felt like I had no idea what I was doing. ... I felt like I needed my mom to be there. And she wasn't (NM9)." Some mothers felt hurt when older females in their family were asking why mothers need help. "Even my mom, she'd say I had 5 kids and I didn't have anybody to help me. There was a lot of suck it up attitude coming from her (NM5)." Some mothers

felt a great deal of pressure from their spouses – to keep the house clean and to have meals ready, for example.

Many people freely give advice to new mothers, whether they have asked for it or not. This could include the cashier at the grocery store or an elderly lady walking down the street, but it commonly comes from well-meaning friends and family. Two of the most common areas of advice are related to sleeping and breastfeeding. One mother described her reaction to the advice she received about how to get her son to sleep on his own. "You get people who are saying, my god, just put him down, and let him cry. I didn't want to do that, at all. I did it on 2 different occasions, and I let him cry for 45 minutes both times. I was nearly vomiting. I just couldn't stand it (NM5)." In some cases these well-wishers intend their advice to be helpful, possibly based on their own experience. In other cases, they are telling the new mother that what she is doing is wrong. Regardless of the intent, many mothers hear that they are being judged in how they are performing in the role of motherhood, which further contributes to their negative sense of themselves as a mother.

4.1.4 Pathway to care. Once mothers acknowledged their symptoms, and recognised that they wouldn't get better on their own, they asked for help. One mother had a great deal of difficulty finding the right help for her.

I just couldn't navigate through it. I think I just didn't even know where to go. I really needed someone to just take me by the hand, literally, and say, this is doctor so and so, he specializes in this, he will help you. Use those words. Not, try your family doctor. Try this, try that. I didn't have the skills to even ask for that help I think. (NM2)

Several mothers described a particular incident or trigger that caused them to realise they needed help. Other mothers realised on their own, over time that they needed help, that they were not functioning, not sleeping, crying a lot, or getting very angry. "It was a disaster it felt like. I couldn't imagine, it ever turning around. And I didn't want that, cause that's not how I envisioned being a mom. That's what led me – it was time to go to my family doctor (NM8)." Still others were encouraged to seek help by either their partner or their mother.

Most mothers who participated in the study named their FP as the first choice for seeking help, most likely because they already had an established relationship. Access to other health professionals in Nova Scotia is designed in such a way that FPs are seen as the gatekeepers to other health resources. Other mothers either chose not to contact their FP or pursued help in addition to what their doctor could offer. The timeline involved between realisation that they were ill and actually receiving help differed among mothers, varying from several weeks to several months. Some mothers described it as a fairly quick process, especially if they asked for and received help from their FP or other health care provider directly. Others felt it took a long time, particularly if they were referred to a different health professional for treatment. In some cases, seeking help and/or treatment was delayed because either mothers or FPs did not realise the extent of their illness right away. NM10 described how her previous experience with postpartum depression influenced her decision to seek help with her second baby.

I knew it had gotten so bad with my son and I didn't recognise it. And the second that it started happening with her, I started remembering what it was like with my son. And I was like, - and I still- you still go through that battle, is this just some postpartum blues and everyone has a moment. And you know, we're not sleeping, or is this gonna spiral out of control, and just keep getting worse, and worse, and

worse, and worse, and worse. And if it starts getting worse, in two weeks am I gonna be able to say, I can go to the doctor? (NM10)

Individuals in some mothers' lives were able to provide assistance with various household tasks or to give them encouragement in their new role as a mother. Support was described as their family keeping an eye on them; a friend being a good listener; a husband changing diapers through the night; or someone bringing you a meal. Mothers typically named their partners as their greatest source of support, followed closely by parents, particularly their own mothers. Many mothers also cited friends as an important source of support, whether they had been friends for a long time, or had met recently online. Various health professionals also provided support to mothers. Mothers shared examples of the support they received from their public health nurse and their FP.

I think what my doctor did, checking up on me so often, and having notes saying, you know, like, I think that continued check-in every time, of how are you doing? As mom, not just ask how the baby doing, but every- and every baby visit, too she asked me. So she asked me a lot of times, if I was really doing okay. (NM11)

Mothers also felt a great deal of support from various community resources. Specifically, mothers named family resource centres throughout the city and public health drop-in sessions. There were also unexpected sources of support. Several mothers were surprised when older women they did not know very well shared their own experiences with PPD, lending valuable emotional support and empathy.

In contrast to the support they received, mothers also described various obstacles they encountered in seeking help for PPD. An obstacle was anything that made it difficult for them to access care. Several mothers, for example, indicated that they had to fight to get help. NM1 began asking for help while she was pregnant but felt she wasn't heard. NM3 also had to convince her doctor that she needed help. "It took 2 or 3 visits for me to

finally convince her to finally refer me to here actually... I guess I wasn't being well versed about what I was feeling (NM3)." Mothers who did not feel well supported by their FP reported a lack of communication. Several mothers were frustrated that their doctor did not broach the subject of how they were feeling with them.

... my family doctor, anyway, uhm, the appointments are so short that, like, you don't ask like how are you and even if you do ask how are you, I don't know that I would have understood that that was what she was talking about. I mean, I'd go like good, oh things are good, yeah, but not like, is your mental health okay, are you handling things, are you showering, are you doing this, are you eating, can you get out of bed and those kind of things. (NM12)

Other mothers felt their FP was either particularly unhelpful or not very understanding of their situation. Mothers also expressed a great deal of frustration with what they referred to as "the system". Examples include access to RMHS and/or community mental health, lack of resources such as information about formula feeding, and long wait lists for mental health care.

...I think it's disappointing that the lack of coordination between the physicians, mental health, and public health, in terms of being able to support moms like this, because we may not need to go to IWK for an appointment, but to have someone be able to come and talk to you. (NM4)

Each of the mothers who participated in this study was diagnosed with what they understood to be PPD, although several mothers noted that they felt a great deal of anxiety as well.

So then he said you have anxiety ... I think my depression was such a low grade, like an underlying ... ugghh, I did have thoughts like I don't really want to do this every day. I think that is depression. And thoughts like, this really sucks. I don't wanna take care of my kids every day. I just wanna run away. But I never thought I'm suicidal or I wanna end this ... I didn't realise that was depression, I didn't recognize that as depression. (NM2)

Several mothers noted how important it was to them to feel validated in having a health care provider confirm their symptoms and how they were feeling by naming their illness and knowing there was something that could be done about it.

And, so just for that doctor to say, you're right. That isn't the way that you should be feeling, and this is why, and it's not you, it's an imbalance in your brain, and that, just, and I knew that, I knew it. But having someone else say that to me, just was like, a huge, I remember, just this sigh of relief. (NM10)

Other mothers expressed some difficulty in accepting the diagnosis, assuming that PPD meant you were extremely ill.

4.1.5 Feeling better. Mothers described aspects of feeling better after they had been diagnosed with PPD, including what helped them to feel better and how they knew when they felt better. Health care providers were cited most often by mothers as having contributed to feeling better after being diagnosed with PPD. A common feeling among mothers was a lack of desire while they were ill to interact with others, whether it was other moms, family, or friends. Many of them associated a desire to connect with others with feeling better, whether it helped them to feel better or they noticed a resumed desire to connect with others. Some women were already in a situation where there were other mothers around, and it was as simple as starting a conversation about their shared experience. Other women took advantage of organised mother and baby activities to connect with other mothers. Several participants identified a benefit for them of connecting with other mothers online. They used social media as a source of emotional support, seeking advice, and problem solving. A great deal of discussion that takes place when mothers get together revolves around practical issues, however, mothers noted that the support they gained by interacting with other mothers was emotional as well.

If it wasn't- wasn't for this place ... coming to baby group every week. And that, not only was I socialising her at least once a week, it was something that I could look forward to at least once a week ... Coming to a place like this, it's a whole group of women who support you and you're here with them once a week ... (NM13)

Mothers reported that, over time, they felt they got back to normal and started noticing when they felt better. They described knowing they felt better by marking subtle and not so subtle changes in how they perceived the world around them. Some mothers described it as feeling more like themselves.

[My husband] kept saying, it's like, you're back you know. And I didn't even realise in some ways how I hadn't laughed much that whole year, or it was forced if I did, or whatever. It felt like I could smile and relax more. ... I finally was like, ahh, I can function and breathe again. (NM11)

NM9 noticed a change in how she was feeling toward her son, "... I just gradually started to feel a little bit better, and I felt more pride and more love for [name]. It was really- I was feeling so happy to be his mom and happy – I just felt good (NM9)." Several mothers who participated in the study also commented that things got easier simply because their baby got older. NM6 noticed a change in her baby at six months. "Of course, my daughter, she's smiling – oh, you actually are happy that I'm taking care of you. They're not screaming in your face, and you're like I'm doing everything for you (NM6)."

Many mothers initially felt a great deal of sadness as well as the heaviness of overwhelming guilt as a result of experiencing PPD. Mothers needed to let go of the guilt and realise they are human and should give themselves "a break".

... now that I am feeling healthier, I would probably go back and tell myself, if I could go back in time and tell myself, you probably didn't have as much control over that as you thought you did, or I was probably taking too much ownership

for the way my brain was behaving, thinking that if there were other things I had done differently or just tried harder, I could have fixed it. But I think what I was probably referring to was, you know, I didn't have to breastfeed, right, so I could have, you know, there are things that I could have done to lessen the burden on myself so I didn't have to breastfeed, I didn't have to be the person who responded to the baby's needs all the time. So there are certain things that I could have done differently, but I probably didn't have as much control as I thought I did. (NM4)

Other mothers spoke of feeling like they needed to do and be "more" while they were ill, despite the fact that they would never have that expectation of someone else. "Give yourself the same advice you give other people ... if it was anyone else, thinking how I was thinking, what would I say to them (NM1)?"

As mothers felt better, they noticed that they started to pay more attention to what they were eating and whether they were showering and getting dressed. Some mothers felt it was enough for them just to get out of the house. NM4 turned her focus to exercise because that was important to her. "Getting to the gym definitely helps ... because it gives me a break, but also the physical endorphins of it, really make a big difference (NM4)." Several other mothers felt it was important for them and their families to set boundaries, whether it includes a limit on the number of activities they were involved in, or the limitation of visitors to the house.

Mothers who participated in the study described various methods for participation in their treatment. Many of the women felt that taking medication was key to their feeling better. Depending on the method of treatment they received, mothers may have been attending regular appointments with their FP or they may have been participating in therapy with a mental health professional on a regular basis. Mothers were often given homework that included specific activities they would have enjoyed before having their

baby. This suggestion was often coupled with encouragement to get out of the house. "...

I like taking pictures of- especially for winter I like the trees with all the snow on them.

Like, mostly scenery and animals ... I would use my mp3 player to go outside and I would take pictures... (NM14)."

Many of the women who participated in the study had no idea what to expect from treatment. Of the mothers with previous interaction with mental health care providers, there were several comments made that previous experiences had not entirely been positive. "I was like, okay they're just going to push drugs on me and push me out the door. And that was my big concern (NM3)." NM2 had previous experience with mental health as a health care provider and through growing up with a mentally-ill mother. " ... I can hand out the meds, I've seen what people look like when they're in the psych ward, to be honest, I thought that's where I was headed (NM2)." One mother said she had been hoping for some "magic" in accessing help. "I think it's just frustrating because you think it's gonna be a magic fix, kinda the way public health, right, I figured they'd come in, hold the baby this way and then she'll breastfeed like a dream. That's not the way it works (NM4)."

Specific details of treatment varied among mothers. All but two of the mothers who participated in the study began their search for formal help with their FPs. This may have been because of their long-standing relationship with their doctor or because of having to take their children for regular check-ups during the postpartum period.

Treatments or services offered included referral to therapy; medication; and ongoing office visits. Online resources were also recommended in some cases. Overall, mothers indicated they were satisfied with the treatment they received from their FPs. NM9

stated, "I feel better ...I can sleep and I don't worry about things as much (NM9)." Not all mothers, however, were satisfied with their experience. One mother felt a lack of communication with her FP that left her feeling dissatisfied and unheard.

My doctor, my family doctor now, never even asked, do you feel depressed, are you depressed, do you feel suicidal? Are you thinking of harming yourself, how are you doing today? Are you happy? How are you doing? Okay. Stay on the pill for another month or two and come back and see me. Really? That's it? I'd like to wean off. I don't think it's a good time. Well I don't like the way it makes me feel. I don't think it's a good time. I have no sex drive. I don't think it's a good time. I'm losing my hair. I'll send you to a dermatologist. I said, I've read on the Pfizer website that it's, uh, not rare, but uncommon side effect. I realise postpartum hair loss too, but I don't know which one it is. Okay well we can see a dermatologist. I said I'm not looking for more referrals, I'm not looking for more medication. I'm looking to get off of this and just be done with it. I feel mostly like myself, so it is good to be taking it now, and I realise I should probably keep it up. (NM2)

Regardless of which health professional they saw many of the mothers who participated in the study were treated with medication. Some women were initially reluctant or completely against taking medication for their illness. Women who were hesitant to take medication for PPD commonly held the notion that you would take medication only if you were really sick, and they did not see themselves that way.

I'm sure I had one full appointment, was [health care provider] explaining to me that it doesn't make me a bad person or crazy to take medication. Because if you-I think she said something to the effect of, if you had broken your leg in a ski accident, you would need physiotherapy to rehabilitate your leg. So that you would feel better, and along with that you may need to take muscle relaxants, you may have to take pain killers, blah, blah, blah, blah, your brain is not doing the right things for you right now. When she explained it like that because I came from a sport background and those types of things. I thought she was the best person I ever dealt with. She was able to make me see it for what it was. (NM8)

When asked how she felt about taking medication for her PPD, NM4 replied, "I feel like it's great for other people!" Several of the mothers who were initially hesitant to take

medication did eventually accept this form of treatment and were quick to indicate how much better it made them feel.

Nine of the mothers who participated in the study were referred at some point to RMHS. The majority of these women were satisfied with the treatment they received. Mothers expressed that their comfort and ease at attending RMHS was due to the fact that the health care providers there have a great deal of experience working with mothers with PPD. Several of the mothers who participated described feeling a sense of relief at putting themselves in the care of someone who knew what they were doing. "I feel like they've been there, done it, seen it. They know what they're talking about. They're going to be able to handle whatever I throw at them ... (NM1)." Several mothers were not satisfied with the treatment they received at RMHS. "I think RMHS could use a lot of improvement (NM12)." Several mothers shared that they felt like they were being forced to complete treatment even though they did not feel any better. "I mighta went to like, six sessions there and then I stopped [chuckled nervously]... I felt like I was being pushed out (NM14)." Another mother also felt her concerns were not being heard. "We'd just talk, just like you and I would be talking now. For an hour, but then it would be over, it wouldn't be, when you go home, you should try to do this. Maybe you should read this book (NM7)."

Not all mothers felt that it was possible to recover from PPD. Many of the mothers described recovery as something much more than simply feeling better.

Recovery for these women was a return to how they felt before having a baby, combined with the knowledge that they were able to handle their new role as a mother. Some of the mothers described themselves as recovered but only within certain conditions such as

continuing to take medication, and/or that they needed a bit more time feeling better. NM11 described herself as, "pretty close to 100%... I wouldn't say I'm in some utopia of like, but as far as real life happy, yeah. I think I'm real life happy, you know (NM11)." Another mother also described herself as "close" to recovered. "... I feel like I have a little bit more to go to get back to uhm, being the confident and capable mom I think I was with [Name] ... but I do feel like I'm on that path. And I feel like I'm really close (NM12)." Some women felt quite strongly that PPD could not be defined as a finite event with a beginning and an end. NM3 described her recovery as a lifelong "journey".

Recovered from the postpartum aspect, yes. Depression in general, I guess there's a lot of aspects that go into becoming depressed. And I spent twenty-some odd years getting to that point, and things that have caused that. It's kind of a lifelong learning process. Recovery is a loaded word. I feel good. Recovered, m-a-y be a bit of a strong word. Definitely from the postpartum aspect. That was a fairly, quick thing, but unfortunately to fix that you kind of have to fix a bunch of underlying problems. Becoming more self-aware and fixing those things that got you to that point in the first place, it's kind of a lifelong process of changing behaviours, thoughts, attitudes. (NM3)

Several of the mothers who participated in this study were concerned about how they will feel long term, with one mother expressing worrying that she will always be wary becoming depressed again, and another mother expressing the feeling that her PPD would follow her throughout her child's life.

I think because I had it, I will always kind of have that sensitivity to it. Or I feel like it's something that's always going to be a part of me. It's ... no different than if you lose a family member or if you have a traumatic experience, it sticks with you for life. It's always there, under the surface and if someone says something or something happens, it can remind you and it can trigger you, like that. (NM1)

Mothers spoke sadly of the things they wish were different about when they were ill. The greatest cause of regret for mothers in this study is what they missed out on when

they were ill. The guilt they felt was related to medication for some mothers, wishing they had begun this form of treatment earlier. As NM4 said, "... as soon as I started to take my medication I was like, shit, I should have been taking this from the very beginning (NM4)." Long resistant to the idea of taking medication, NM7 also waited a long time before deciding to take medication. "I wish that my doctor had told me they were prenatal vitamins and gave me, like, this bottle ... because, I think, I wasted a really long time, where I could have felt better ... I wish I could go back and it wouldn't have taken so long (NM7)." In addition to seeking help or taking medication sooner, mothers identified a number of other things they would do differently given the chance. A common change would be to accept help when offered. Mothers who spent a lot of time trying to breastfeed indicated they would switch to formula rather that struggle with breastfeeding again.

4.1.6 Stigma. Stigma emerged as a key theme in mothers' description of their journey through PPD. In this context, stigma was described as the perception of mothers that others in society would think less of them because they were having difficulty transitioning into motherhood. Many mothers spoke of the disgrace and embarrassment they felt at experiencing symptoms that led to a diagnosis of PPD. One of the most notable consequences of feeling stigmatised by how they were feeling was the inability of those affected to ask for help. For many women this led to them not acknowledging their symptoms (to themselves), disclosing their symptoms (to others), or seeking help.

Mothers expressed a desire not to "burden people" and being "afraid" to ask for help.

Mothers needed to acknowledge their symptoms to themselves. "I'm always open to talking to someone, I've seen people before. It was just more, I think I didn't want to

admit that I needed the help, that I couldn't handle it all (NM4)." Telling someone how much they were struggling was like admitting to some personal fault. "I didn't feel ashamed to ask for help, but I really didn't want to. Didn't wanna acknowledge that I needed it (NM9)." Mothers also needed to admit to others how poorly they were coping. Mothers described not wanting to "disappoint" people, or make them feel obligated to help. They also confided they felt their diagnosis of PPD indicated a "weakness" in themselves they didn't want others to see.

Participants pointed to a lack of understanding to explain the stigma they felt at being diagnosed with PPD. Many mothers did not even understand it themselves, in some cases, not even realising they were ill. Several mothers described a sort of fatigue in their friends in terms of not wanting to hear any more about how they were struggling. NM6 was questioning herself, wondering aloud what she was doing wrong that her baby wouldn't stop crying. "It was sort of this, I think some friends were, [laughing] they were like, that's enough, we get it, you're having a really shitty time (NM6)." NM2 indicated she spoke mainly to her husband about how she was feeling. "I talked to him because he was my main person ... I talked to him so much about it that he was tired of hearing it and he just ... He just really didn't know what to do with it, I think."

In response to the stigma they felt, mothers decided to be very open about their experiences. NM10 shared her feeling that, as a society, we are too quiet about mental health issues and the importance of telling people about her experiences. Acknowledging that not all women are able to speak openly about their thoughts and feelings, NM6 counts herself "fortunate ... cause [she knows] there's a lot of women who can't just- or feel they can't- say something." A few participants indicated a desire to share their story

so that it might help other mothers in the future. "... it doesn't matter what kind of depression it is ... it's always one of those things that nobody wants to talk about [tearful]. If it was talked about more, a lot more people could get help. And a lot more people wouldn't be ashamed to ask for the help [tearful] (NM13)." NM11 stated that she would probably have found it helpful to have someone to talk to about her PPD if she had known of someone who had already gone through it. "So ... now I definitely talk about it a lot more with people ... (NM11)." Mothers were asked how they would describe their illness to others. Some were keen to describe their symptoms and further details of their experiences and how they were feeling. Some mothers both named their symptoms as PPD and detailed how it felt for them, feeling that this would help others to recognise the symptoms in themselves, if necessary. An important part of mothers being open about their experience with PPD is letting go of their concern that others were going to judge them because of their illness, and telling people about it anyway. NM1 said, "...I am much more comfortable. I'll just say it now, screw it, it is what it is. No differently [sic] than if someone tells me about their c section scar, or the problem they had breastfeeding. It's no different in my mind, anymore."

Another way for mothers who have struggled with PPD to combat stigma is to promote understanding of what they've experienced. Mothers who participated in this study talked about sharing their experiences and stories as a way to educate others. NM10 described what it is like to experience depression,

... just that sense of like, trying to wake up and trying to force yourself to get out of bed. And then finally getting out of bed and then, like, breaking down cause you have to get dressed. You just use all your energy to get out of bed, and like, you forgot you weren't even wearing pants so you can't go downstairs ...

NM11 has noticed that people are surprised to hear that she is both taking medication for depression, and happy. She tells them, "... those are not separate things. At least not for me (NM11)." NM6 indicated that her symptoms emerged from her own unrealistic expectations for motherhood. Now when she talks about new motherhood with others, she tells them, "It can be really shitty (NM6)." Sharing a common experience with another person is very powerful. NM1 acknowledged that she may not be able to do or say anything specific to help another mother who is struggling with PPD, but "been there, is like the most wonderful thing you can hear when you're going through something awful (NM1)." NM13 wants other mothers to know that "... it's completely okay if you need to ask for help. Don't, you know, don't hide how you're feeling or don't put it off, till you get to a point- if you sorta maybe think you might need help, it's better to get it now than to wait ... (NM13)."

Having experienced PPD, each of the mothers who participated in the study expressed a desire to help other mothers who may also be struggling or who may struggle in the future. "I got to the point where I realised how important it was to really speak about it more, because I don't want other people to feel like there's something to be ashamed of (NM3)." NM6 agreed. "The more you talk about it, the more that it's out there. I really think it's about getting the information out there to women (NM6)."

4.1.7 Advice for others. Mothers were eager to provide advice for others who are either struggling with PPD, or supporting a woman who is.

... I wish someone had told me, it's not all rainbows and butterflies and everyone always says, oh you're gonna have a baby, it's so great. No one says, but you could also feel like shit and have postpartum depression and anxiety. ... I'm not gonna say, you're gonna be depressed, but I would say, accept- no one ever takes the advice until it's too late. (NM6)

Participants suggested that new mothers speak up. This could include during pregnancy, post-delivery, or during the postpartum period. Mothers strongly emphasised how important it is to let someone know if you are feeling "off", and not to wait. Another suggestion from mothers was not to make excuses for how you are feeling, "I think that sometimes we make excuses for, like, we're so tired or whatever, for why we're feeling the way we are. But it's about recognizing that there could be more going on. And being okay with that (NM11)." NM10 reassured mothers not to "... think that it is has any indication on what type of mom that you're gonna be." Telling others about how she was feeling was key for NM3. "And even after I started coming here and didn't talk to people about it, it felt like I had a dirty little secret. I was walking around with this big secret and it wasn't really until I started openly talking about it that that weight was lifted (NM3)."

Another suggestion for new mothers was to accept as much help as you are offered.
"Accept all the help you're offered and seek out more. If someone wants to bring you a meal, don't say oh gosh I'm fine cause that's what I do. Oh no, no, I'm okay (NM2)."

Mothers also recommended that new mothers seek out other mothers for support. This could be helpful simply by having another person to talk to, but could also be helpful in helping to normalise what they are feeling and the struggles they are having. This connection could take place in person or it could take place on-line. Several mothers commented that they were connected to other mothers via facebook and by reading others' blogs. NM13 highlighted the benefits of meeting a group of moms at a local family resource or community centre. "... one of the biggest things that I tell them is to get out to a group like this. Where they have a room full of moms who are supportive and not necessarily that are all of the same mindset (NM13)." NM6 urged mothers to examine

their postpartum expectations. They don't need to be perfect and it's okay if their experience is different than someone else's. "[Let] women know it's okay to be open and talk about this, and not just hold it in (NM6)." Mothers also wanted to share with new mothers that it is okay to give yourself a break.

... you are only going to get better at all this and being able to do that and just to be able to reach out for supports and tell people what you need when you need it. That's, and that's a skill, right, that's not something you can just tell someone to do, but, you know, I think, culturally, we need to give women more capacity to be able to say, this is what I need and this is what I need from you, in order to get through some of this stuff. (NM4)

The advice offered by mothers for family and friends of new mothers included two similar, but separate groups. The first was for the spouse and immediate family. The second group included friends and family who live outside the home. NM12 emphasised the importance of making sure spouses are educated about PPD before the baby arrives; they are likely to be one of the people who spends most time with a new mother, so they are in a unique position to be able to recognise when she is not herself. Participants recommended that partners take mothers seriously when they express concern about how they are feeling.

... be supportive, be there, listen to them. Take their concerns seriously, even if you don't think that they're serious. Things that I brought up to my mom or to my husband. I felt they were very serious, but I just wasn't getting that response. I wasn't – I was feeling like I was brushed off or I wasn't being – it felt so big to me but to them, it was like, oh, that's nothing. For me, that was weighing really heavily on me. (NM9)

NM11 commented on how important it was for her to have her husband come with her to her initial appointment seeking professional help. "And having him there, like he came to the appointment with me and was able to talk to them a bit when I just couldn't. And I

think having somebody to do that with is very important (NM11)." Another recommendation from new mothers was for partners to provide instrumental support, which could include taking the baby so that the mother could either sleep, or just do something other than baby care. Suggestions for family and friends who lived outside the home were similar to what mothers would recommend to partners with a particular emphasis on providing physical and/or practical support.

I would say helping with- cause at the, with a newborn, everyone has their opinions of well, they're hungry, no they're tired, no they need their diaper changed, that shirt's too tight. I would say less of that type of help. I know that comes from a good place, people are just trying to help, but more of the physical things. (NM6)

Suggestions included walking the dog; cleaning the bathroom; doing the laundry; and most commonly, bringing a meal. "If you go over and see that the laundry isn't done, or they don't have food, or they need to take a shower because their hair's stuck to their face (NM6)."

A common complaint cited by mothers was the expectation of friends and family to be able to drop by for a visit. Friends should "... come over and help with the cleaning, drop over some food. With no expectations of a visit or a happy clean house as well (NM4)." One family told potential visitors they were not allowed to come for a visit unless they were prepared to offer help while they were there. "We needed help with regular, around the house things. We needed help to get diapers and groceries ... something simple like that. If you really wanna help, that's what we really need. You know. And you find out pretty quickly who's serious about helping you (NM8)." Mothers would also recommend allowing the new mother to talk, keeping in mind the importance of not judging her and just listening. "It might surprise you that your loved-one is feeling,

feelings that you seem to think, oh my gosh; try to be open, non-judgmental to try to encourage people to seek out additional supports (NM4)." NM2 agreed, "... don't say you shouldn't talk about it. Let them talk as much and as often as they need to. And just listen." Some mothers may not recognise the symptoms they are experiencing as PPD. Friends or family may need to bring up the topic on their own.

Mothers interact with multiple HCPs throughout their pregnancy and following the birth of their baby. HCPs should not assume mothers know what to expect postpartum. They should ask more questions when they see new mothers with their babies. Make it part of their routine to ask about a mother's mood. "... I think there had to be a focus ... obviously the primary goal is healthy mom, happy baby- I do think there needs to be a focus on what's going on inside. And not medically inside, I mean feelings and thoughts, and emotions (NM1)." One final thought for HCPs was to not just provide medication in isolation of trying to discover any underlying issues.

Policy and decision makers in the context of this study would include anyone who had the authority to make decisions around policy and/or funding that would affect the support of mothers with PPD. Mothers had suggestions for them as well. They named IWK; community resources and public health; FP; and government. Related to RMHS, mothers were concerned about staffing, access to HCPs, and lack of child care available which would allow them to attend and/or focus on therapy. One mother suggested that all women should start talking to someone about their mental health when they are pregnant. "It should almost be mandatory. Even if it's only once or twice. These feelings are gonna come (NM7)."

Mothers also identified the importance of providing sufficient and appropriate community resources. Mothers described the usefulness of the public health drop in sessions and suggested these could also include someone with training in maternal mental health. There was a similar recommendation that public health home visits be reinstated in a team context, including a physician or other HCP who is able to make referrals to appropriate services or a nurse who was able to provide mental health counselling. Another suggestion would be the establishment of online resources, particularly those than can be accessed in the middle of the night, when mothers are up feeding their babies, or soothing babies who are unable to sleep. Several mothers felt strongly that breastfeeding contributed to the development of PPD. Mothers advised that greater resources be put into providing information on formula feeding. In order to support all women in feeding their children, "...I think they need to have great resources on how to be, the best way to do formula feeding. And for women who are combo feeding, or can't, how to deal with that (NM6)."

Mothers' recommendations for government included increased funding for mental health, including the resources discussed above. They suggested this funding be used to implement and maintain a preventative approach to maternal mental health care. Another suggestion was a change in the fee structure for FPs to allow for additional time for new mothers and those with PPD.

4.1.8 Summary. Fourteen mothers who received treatment for PPD within the past three years described their experience. Nine mothers received treatment at RMHS; two mothers participated in treatment at RMHS in conjunction with their FP; four mothers were treated by their FP; and one mother was treated by a counsellor. Seven

themes were identified, which, together describe these mothers' journey through PPD. The first theme, being ill, outlined how mothers were feeling while they struggled with PPD. Challenges listed the things that made their lives difficult as new mothers. Expectations mothers held for themselves, for motherhood, for treatment and that others held for them. Mothers described their pathway to care, the different steps required for them to access treatment for PPD. The fifth theme, feeling better, described various resources that either contributed to mothers feeling better, or activities they felt well enough to participate in since being treated for PPD. Stigma identified the shame mothers felt when faced with a diagnosis of PPD. The final theme describing mothers' experience was a list of advice they would provide to others either to avoid PPD or to support someone who has it.

4.2 Caring for mothers with PPD

Four HCPs from the RMHS at IWK and four FPs were interviewed to learn more about their experience providing mothers with treatment for PPD. All participants were female. All of the HCPs at RMHS and two of the FPs interviewed work in a collaborative care model. This type of care typically takes place in a setting where health professionals work within a team and share decision making around treatment options or support afforded to patients in their care. The remaining two FPs practiced individually.

HCPs at RMHS at time of interviews included three social workers and one psychiatrist. Individually, HCPs at RMHS have been providing treatment for women with PPD specifically, for a range of 2.5 to 10 years. All HCPs at RMHS are responsible for providing support and therapy to mothers with PPD, although the type of support they provide may vary according to health profession. Social work, in particular, tends to take

an advocative role, and also provides concrete practical support in accessing basic needs such as housing, food, or financial assistance. The psychiatrist on staff performs intensive therapy with mothers and prescribes medication as required. HCPs may also refer mothers to appropriate community resources, and liaise with other health care providers in the community.

FPs who participated in the study had a wide range of experience, from 10 to 31 years. Each of the FPs practices in family medicine and obstetrics. Part of their role is to care for women throughout their pregnancy, through delivery, and after the birth of their baby. Both FP1 and FP3 indicated they formally screen for symptoms of PPD six to eight weeks postpartum when mothers are seen for their postpartum checkup. All FPs would see babies at regular, designated intervals and indicated that they would be asking the mother about her mood and any struggles they may be having throughout this time.

Four themes emerged during analysis, as presented in Table 4. Themes are described below and provide further insight into how HCPs and FPs care for mothers with PPD.

Table 4. Caring for mothers with PPD

Wish List

Tweet I. Carting for moments with T.E.	
Themes	Description
What they see	-range of illness seen in postpartum mothers
Care plan	-aspects of care related to treatment or support for mothers
Challenges	-difficulties associated with providing care to mothers

-desired improvements to offer better care to mothers

4.2.1 What they see. HCPs and FPs described the presenting complaints they see in their patients, specifically women who had been diagnosed with PPD. Many illnesses, including PPD, present with specific characteristics (symptoms) that collectively point to a specific diagnosis. Symptoms are self-reported by mothers and include feeling low,

overwhelmed, tearful, exhausted, worried, or simply not coping well. FP2 described mothers who are not enjoying their baby; when baby is sleeping, the mother is unable to sleep; they are uninterested in getting out of the house or seeing friends; and can also experience physical symptoms. FP4 described a change in personality, flat affect, being sad, and describing that they are struggling. Mothers will sometimes experience disruption of sleep, changes in appetite, or weight loss that is unexpected. In addition to the symptoms described above, HCPs at RMHS have noted that mothers describe changes in relationships as a result of their transition to motherhood.

HCPs at RMHS indicate they typically see with women with "some kind of mood disorder", mostly anxiety or depression. At the clinic where she practices, FP1 said they "see a lot of mood disorders; I'd say a couple times a year at least, we're treating somebody for a true diagnosis of a PPD." Other FPs indicated they did not see a lot of women with a clear cut diagnosis of PPD. FP4, in particular, disclosed that she has had very few mothers diagnosed with PPD in her practice. She said many of the women who present with symptoms of PPD often have many other complications in their lives making it difficult to differentiate between a true PPD and a difficult life.

Mothers may regularly encounter stressful situations in their lives that can influence their ability to cope with the changes in role and challenges of motherhood. Examples of such stressors include low income, food insecurity, conflict with partner, lack of support, housing stress, difficult relationship with "family of origin", and previous trauma. A healthy woman with a "predisposition toward mental health problems (HCP4)" may be faced with situational stressors on a regular basis and is able to navigate them

with ease, however, when she is also faced with a significant life transition such as becoming a mother, her mental health can become unstable.

Adjustment to motherhood could include physical, hormonal, emotional or functional changes. For some mothers, it is only a matter of time before they are able to adjust, difficulties resolve, the baby gets older, and life gets a little bit easier. For other mothers, it may be helpful to also connect mothers with "services in the community or encourage them to go to mom groups and get out of the house (HCP1)" or they may require brief psychotherapy to help them cope with all the changes in their lives.

Another complication of PPD is seen in the developing relationship between mother and baby. "[Attachment is] the process by which a parent and child form a relationship ... [it contributes to] healthy emotional development in the infant (HCP4)." There are varying degrees of attachment, ranging from secure to insecure. A secure attachment is demonstrated by a baby who seeks comfort from their parent in times of distress, or who regularly checks in with their parents while playing or exploring a new situation. In an insecure attachment, a baby will show no specific affiliation for any individual, perhaps approaching strangers as easily as their parent, or the mother may seem to be ambivalent, unaware of the baby's needs. FP4 sees this as a cause for concern, when a mother is,

... not attaching to their baby or not being able to care for their baby, or showing ambivalence towards the baby, cause that's, that's really alarming. Like, even when people are depressed, tired, overworked, whatever, they still love their children ...to me, is a real big kinda red flag. (FP4).

Insecure attachment is a concern throughout the first year of life, however, it does go beyond this time frame as well.

Many mothers think they have a good idea of what motherhood will be like, but for some women, expectations may differ from reality. "... societally, we are told that it's supposed to be wonderful, and then when it's not I think it's really impactful (HCP2)." Some women enter motherhood with the expectation that very little will change in their lives; that their partner will share the duties equally; or that motherhood will come easily to them, and that is not always the case. And when things don't go as expected, they begin to compare their reality with what was expected and they can become depressed.

I think, well some, everybody comes into motherhood from all kinds of different backgrounds. We see the moms that come in who are, career-successful, and everything they've done they've succeeded at and had not really- and then all of a sudden they're a new mother and they've got a fussy baby and they've got – advice from a gazillion friends and books and things about how things should be and things aren't like that. I think that could be struggling. (FP3)

One expectation of motherhood that is commonly held is related to knowing what to do. That "you become pregnant, and all of a sudden, and you just, you know. And you don't, necessarily (HCP3)." This lack of "knowing" experienced by some mothers can be reinforced by friends and relatives passing on well-meaning, but unrequested, advice, contributing to a feeling of shame or helplessness associated with not knowing what to do. Another common expectation of motherhood is that all mothers will breastfeed and it will come naturally to them. Some mothers, however, chose not to breastfeed, found it difficult, or were not able to.

4.2.2 Care Plan. Participants described the range of services as well as the major source of support offered to mothers in their practice. HCPs at RMHS and FPs agree on the importance of the relationship between themselves and their patients. "... the biggest predictor of success in therapy is therapeutic rapport. The patient has to feel as though the

therapist cares and understands and is helpful ... in the absence of that, the therapy is not going to work (HCP4)." A large part of the development of a therapeutic relationship with a patient is normalising and validating their feelings. Providing education, and letting women know "that [PPD] happens to 10-15% of women is helpful for them (HCP4)." It is important to develop trust in this relationship to allow the patient to feel safe in disclosing what could be considered shameful thoughts or feelings. The existence of a relationship prior to a mother giving birth allows FPs to compare their knowledge of the patient's "normal" to how they are faring during the postpartum period. This allows them to identify and to address concerns fairly quickly. It also provides them with an awareness of any family history that may contribute to a mother struggling during the postpartum period.

HCPs and FPs discussed the importance of understanding women in context to develop an appropriate care plan. In order for treatment to be successful (with HCPs at RMHS) and to develop the necessary trust (with FPs) for mothers, it is essential to recognise that mothers are the experts on themselves. Women receiving treatment for PPD have had a lifetime of experiences prior to that diagnosis that have contributed to the person she is today. Part of the recognition of each mother as an expert is to identify and honor the resources and strength women have called upon in the past to deal with difficult situations.

FPs begin assessment of any changes in mood while mother and baby are still in hospital. During regular follow up with the baby, FPs are usually asking how mom is doing, "How are you feeling? How are you doing? How are you sleeping (FP1)?"

Mothers will sometimes indicate they are struggling throughout the first six weeks, or

become teary during well baby check-ups. At six weeks, mothers may be asked more formally about their mood if symptoms have not been noted previously. FP4 talked about the importance of also looking for subtle clues regarding a mother's mood. The assessment is based on "... not just what people are articulating, it's also what we observe and how, how that has changed from what we know from before (FP4)." FP1 will follow up her observations with a potential diagnosis with a mother and offer treatment options. "We could talk about medication, we could talk about counselling, we could talk about just getting additional supports in. And then I leave it to them to decide, what they're ready to accept (FP1)."

Each of the HCPs at RMHS provides treatment and support to women with PPD. HCP1 indicated the primary support she offers to women is through psychotherapy. "It would be through talk therapy, getting them to tell their stories and listening to them and helping them resolve problems in their lives." Collectively referred to as psychotherapy, formal treatment modalities most commonly discussed were cognitive behavioural therapy, interpersonal therapy, and emotion regulation. HCP4 used the term "supportive psychotherapy" to describe her mode of therapy being offered. This includes "empathic listening, validation, and assisting the woman in coming to her own conclusions about things (HCP4)". All providers deliver a version of "talk therapy" but only the psychiatrist on staff is able to prescribe medication. HCPs at RMHS described their mode of treatment as "eclectic", referring to the incorporation of multiple treatment modalities into the care plan for an individual patient, rather than using only one modality based on their own expertise and not on whether it fits the mother's needs.

FPs may not be trained in formal therapy modalities, but they offer a great deal of support in other ways. For example, mothers often need to be reminded that what they are experiencing is normal.

Most of the time it's transient. Most of the time the tears are there and it's overwhelming, and you're exhausted, and you're anxious, and if you just support people through that period of time, most of the people will get better. I think most people are willing to hear that and to be reassured that it's normal and that it will probably get better. Who can support you, who can help you, what can we do? (FP1)

FP1 notes the importance of also making mothers aware of resources in the community. FP2 asserts it is important to let mothers know PPD is fairly common and to let them talk about their symptoms. In FP4's practice, she and her prenatal nurses begin to build community among mothers throughout the duration of the prenatal group offered in a non-intimidating environment. Healthy snacks are offered, prenatal care is provided, and there is a lot of discussion of the supports offered after baby is born.

Pharmacologic treatment is sometimes offered in addition to, or in place of, psychotherapy.

And it's not about the fact that they're not doing the therapy right or, it's just a matter of chemically, that those chemicals are in such a state that they can't get the full focus. And it doesn't mean it has to be forever, and all of those kinds of conversations that you would have with somebody bef-, because there can be a huge fear, especially if they are pregnant or breastfeeding, around what those meds are going to do. (HCP3)

Medication may be prescribed during a mother's treatment at RMHS, or it may be offered by FPs to mothers requiring treatment for PPD. FP2 describes her treatment offering as "medication and talking to them." She notes how important it is to better understand their concerns, "... let's look at your mood. Are you eating, are you sleeping

... those are sometimes the things that will differentiate for me the person who's the person that is depressed or not depressed, or who needs an antidepressant (FP2)." Taking medication, however, is not always readily acceptable to mothers, particularly those who are pregnant or breastfeeding.

Women, there is a lot of women who are very ill who need medication and they are resistant, they are refusing medication. I mean it is understandable, they are worried about the potential impact on the baby, if they are pregnant or if they are nursing and often times it is an absolute necessity, the only thing that really is going to help stabilise them and they are really apprehensive or resisting that. (FP4)

In those cases where a mother has a previous history of mental health problems, it may be as simple as re-starting her on the medication she took before becoming pregnant. Some moms feel better after just having a conversation about their struggles and disturbances in mood. "I don't- basically if you're having a hard time we talk about it; if you think you need medication we go on medication. I don't make it a big deal (FP3)."

Significant resources are available to mothers in the community and provide much needed support to women. Public health is one of the key resources available in the community. This could include a series of visits to check up on a mother and her baby or to provide breastfeeding support, or it could include enhanced visits when a mother has been identified as having few resources and needs more support. Another commonly recommended source of support located in the community is the family resource centre. Family resource centres located across Halifax provide resources and support for families related to early childhood development and parenting, and also provide the opportunity for peer support. FP1, in particular, works very closely with her local family resource centre, often referring her patients to the centre and their programs. FP2 also encourages

the mothers in her care to attend the local family resource centre, "... I know that if they can get into the ... programs over there that they will get support." At her local family resource centre, they have a prenatal program, public health visits, parenting education, and peer support. FP2 has observed in her practice that many of the mothers who access the family resource centre do "better" than mothers who are considered to be "successful", i.e., financially stable, but socially isolated.

I feel like sometimes the girls who go there have better access than some of the normal [air quotes] suburban wives, women, who are not- who are not seeing a lot of people. And who don't go to public health, and don't go to- that kind of stuff. They're paying for baby and me at the fancy place and not really getting the same scrutiny. (FP2)

She sees definite advantages for mothers who are accustomed to accessing services in the community.

So the person who's needy in other ways, who's on income assistance, who's used to accessing community services is sometimes more willing to access community services than the person who has been always independent, so it's interesting that they- they have bigger problems to solve, that group of people, and more diverse problems but I think that, thinking about the people who we're probably missing more, are probably the people who appear to have it together. (FP2)

Other FPs also refer mothers to public health, but FP4 has noted some limitations with how this is received by mothers in her care. Mothers in her care do not always welcome health care providers into their home in the absence of a prior trusted relationship.

But in my experience, the public health nurse, which is an unknown individual to them, is often less well received. And sometimes judged as, viewed as being judgmental, because ... it's a different environment than your average middle class white family. And so there's often a- somewhat of a reluctance to inviting a stranger into your home and what is that gonna mean. In particular, if people have experience with children's aid or they've heard stories about oh, they can come

and take your baby. So, that is still a resource in the community but it's- has its limitations. (FP4)

It is important for mothers to participate fully in their treatment in order to gain maximum benefit. Engagement could include getting to all of her appointments, actively participating during session, or completing homework between appointments. Each of the HCP used different strategies for engaging mothers in their treatment. HCP3 discussed how she allows the patient to lead the session. HCP4 described using a collaborative approach. "[I] ... remind them that ultimately they are the experts on them and that my role is simply to provide suggestions and recommendations but they are always to use their own best judgement when it come to follow through and treatment." Engagement of a mother receiving treatment for PPD from her FP might "look different" than it would for a mother receiving treatment at RMHS. Since the FP would typically not be providing psychotherapy, their engagement would be more related to medication compliance and attending follow up appointments.

HCPs and FPs were asked to describe their experience in caring for women with postpartum. HCP2 described the "amazing strengths" her patients have shown.

... I have watched moms go from, you know, being homeless to, uhm, ah, not having, uh, access to their kids or having supervised visits, uhm, having a really strong history of addiction, or strong history of, uhm, being involved with the, uh, correctional systems, ... being undereducated or a, or not having ah, good access to education and I, I've seen moms, you know, you know, really work hard and, and all of those things, uhm, shifted. You know, that they would, uhm, secure their housing, they work in, they've wo-, they've moved into, uh, uh, reunification with their kids, they've moved into re-education, or, or education, you know, ac...accessing it, ... they've stabilized their, their mental health or, you know, they've really worked hard on their mental health; whether it's regulation, whether it's uhm, mood disorders that they've, you know, consistently have taken

their medications and, like, they've just made some huge life changes, so, yeah, I've been really privileged, cause I've, I've seen lots of that ...(HCP2)

There were also examples that did not have a positive outcome. For some patients, the challenges in their lives can get in the way of successful treatment. HCP4 explained that when a therapeutic relationship fails, it's really that the mother hasn't gotten what they wanted or needed from the service. She recalled situations with patients where they were able to address when a therapeutic relationship is not going well, but in other cases patients simply did not return.

Both FPs practicing at collaborative clinics described the additional supports they've put in place for mothers who had situational stressors in addition to their symptoms of PPD. FP1 indicated that she will often partner with one of the community workers at the local family resource centre to ensure the mothers in her care receive adequate support.

One thing all HCPs and FPs that were interviewed have in common is a commitment to providing mothers with the best care possible. HCP3 described this desire, stating, "I feel blessed and fortunate to be able to do the work I do. And I feel really honored to be able to bear witness to somebody else's life. To be a part of that journey (HCP3)." HCP2 emphasized that because she works with a caseload of women living in challenging circumstances, she feels a strong desire to be able to help the mothers in her care in addition to providing treatment. FP1 discussed her gratitude to be able to help women in her care who are struggling with PPD with some of the more difficult aspects of their lives.

... I think that it's really, it's rewarding. I think that for the most part, when someone feels comfortable to tell you those things and then you can resource and

put resources in place and help them, you know that you're really making a difference not just for them but for the baby and ... I find it rewarding to sort of be like, I can help with that. (FP1)

One of the options available to FPs in the community and to HCPs at RMHS is referral to a specialized service. For RMHS this could include referral to community mental health if mothers do not fit their criteria for treatment. FPs have the option to refer mothers with PPD to RMHS at IWK or to community mental health. FP3 suggests to patients who are prescribed medication for PPD that they also seek private therapy for their illness. FP4 typically involves RMHS only in cases where the mother has a significant pre-existing mental illness. "Well, for example, I had a woman with schizophrenia. And an active psychosis. So RMHS was involved in that and that made perfect sense (FP4)." She explained that women are particularly vulnerable during pregnancy; it makes you "a little more proactive (FP4)" as a FP.

According to participants from RMHS there are a number of other therapies available across Canada that are not currently offered in Nova Scotia. For example there are a number of websites available, which may include a section dedicated to the support of pregnant women and new moms. There are also phone apps being developed that can offer suitable strategies when you input the way you are feeling. HCP1 has noted there are peer-led PPD support groups taking place in the community and supported by family resource centres in parts of Nova Scotia. Women who have "recovered" are gathering with other women and talking about their experiences, what has helped them to feel better, but this is not yet available across the province.

4.2.3 Challenges to providing care. HCPs at RMHS and FPs described the main challenges they face in providing care to women with PPD, particularly highlighting any

of these challenges related to the SDOH. Access to health care and health services refers to the ability of an individual to receive the care they need at the time when they need it. For mothers with PPD, barriers to access include availability of health care providers with expertise in treatment of PPD; seeing people at the right time, including, limitations of office hours, waitlists, location of services; and being able to offer mothers what they need. HCPs expressed concern about how their roles have changed over the years particularly as it relates to decreased access for mothers. There is currently only one psychiatrist on staff; she notes that her role has changed to become one of medication management for the most part and expressed that she would like the opportunity to perform intensive psychotherapy with more patients. Other HCPs also find it difficult to schedule patients with her, resulting in a potential delay for medication initiation and management.

From the perspective of FPs, the opportunity to refer patients with PPD to a specialised service has become more difficult in recent years. Their two options would be RMHS for treatment by professionals with training in maternal mental health, or community mental health, where professionals have been trained in treating general mental health problems. FPs identified long wait lists associated with both options as a real problem, specifically, for referral of women who need treatment right away. FPs working in an individual practice, in particular, indicated they tend to treat patients for PPD with medication themselves rather than referring them to a specialised service. They are unable, however, to schedule additional time for appointments with mothers who are struggling. FPs working in collaborative practice noted they tend to have some flexibility when they see the need to take more time with individual patients. FP4 believes her clinic

provides an accessible service, "a little bit broader than your average family doctor's office (FP4)." And if a mother needs to take more time during an appointment to discuss her concerns, FP4 stated, "... around here, you take as much time as you need."

There are a number of very practical reasons why it can be challenging to provide care to women with PPD. Babies are unpredictable – sometimes they get sick and mothers cannot get out of the house. Sometimes mothers are up multiple times through the night with the baby, feeding or comforting, and she just does not have the energy to get dressed and go to her appointment. It can also be difficult for women to find reliable childcare for their baby and/or older children while they go for treatment for their mental health issues.

It can be challenging to provide treatment to mothers with limited money and resources. Communication may be an issue for some patients. For example, FP1 has had patients whose phones have gotten cut off, with no money to have it hooked up again. For patients with a low level of education, they may not understand instructions; for example if their FP speaks too quickly or is not clear on follow up. Being able to afford medications, specifically, was a challenge mentioned by both FPs and HCPs. For many mothers, simply getting themselves to the appointment can be a challenge. "Transportation, financial issues, paying to get in here, bus, people, a lot of the moms don't have any money to even take a bus. We try to help with that as much as possible (HCP1)." FP1 indicated she and her colleagues try to keep patient care within their own clinic as much as possible because it is difficult for mothers to negotiate the challenges associated with travelling to IWK.

Mothers who have been diagnosed with PPD may also have been diagnosed with a mental health issue in the past. In some cases, this previous experience receiving treatment can act as a barrier to them accessing care for PPD. When faced with a patient's reluctance or distress at having to come to see her, HCP3 asks herself, "How much is it about their actual mental health status, how much of it is about the stigma of atte- you know, attending the mental health, how much is it about maybe a past history with a bad experience (HCP3)." An additional challenge expressed by HCPs and several FPs is their "duty to report"; i.e., the responsibility to notify child protective services of a situation where they believe a child may be in danger of being harmed in some way. Some women may be afraid to seek help due to fear of their child being apprehended or of themselves being reported to child protective services in some way. If they do seek help, they may not be forthcoming with their thoughts making it difficult to provide appropriate treatment.

A fairly common barrier to engagement in treatment as described by HCPs and FPs is shame or stigma. Some women feel a great deal of shame at having been diagnosed with PPD, fearing that they have done something to cause it or that they are a bad mother. When pregnant, or after the birth of a baby, there is an expectation "that women should be grateful, they should feel blessed, should be ecstatic, and should be happy no matter what, because they are having this child (HCP4)". Mothers who feel differently than that are often left feeling ashamed and guilty. This will sometimes lead mothers not to tell anyone they are having difficulties adjusting to life with a new baby. Many mothers are afraid of being judged by their family or their peers for being ill, or by their HCP in terms of child protection.

It can be difficult for mothers, their families, and sometimes even doctors to recognise the symptoms of PPD. It is possible for both FPs and mothers to miss these symptoms or assume they are a regular part of the adjustment to motherhood. A concern raised by FP2 is that sometimes mothers do not realise how badly they are feeling and do not raise the subject with their doctor. Sometimes mothers do not recognise that what they are feeling is not typical until they are no longer depressed. FP3 adds, "They may not feel that they need to do anything about it, that it will just get better if they give it enough time."

When working with mothers in family practice or within IWK, there are a number of other services that can be accessed to provide additional supports to mothers. When these services are not in communication with each other it can be challenging to provide optimum care. HCPs at RMHS identified an additional challenge related to working within the confines of "the system" that governs policy and practices at IWK. HCPs specifically noted concern about the forthcoming limitations being put on staffing within RMHS. It is no longer possible to see all the women being referred because they do not have enough staff. Because of the inability to provide treatment to all women who have been referred to RMHS, FPs have been treating more mothers for PPD within their own practice. There has been some work on the part of RMHS to ensure community mental health clinics and FPs are aware of their ability to partner with them to assist in maternal mental health care provision.

4.2.4 Wish list. HCPs and FPs were asked whether they could identify any improvements that could be made to the service that they are able to provide to mothers with PPD. Although money was mentioned specifically only by a small number of those

interviewed, the implication was that the majority of the items on the wish list could only be achieved by an increase in funding. It was included as a separate item on the wish list to ensure the need is explicitly stated.

HCPs at RMHS provided a long list of additional services they would like to provide in support of mothers receiving treatment for PPD. They would like to provide a more family centred approach instead of, or in addition to working with the mother. Group work could also include parenting skills or psychoeducation with a preventative focus for women who may have a predisposition toward mental health problems or who have a previous history of mental illness. Having space in the community would allow group sessions to include childcare, non-traditional treatments such as yoga or mindfulness, and outreach programs for mothers living in difficult situations. Having a presence outside of the IWK would allow for the development of a home visiting program or day treatment service to allow mothers to receive care in their community. It would also provide the opportunity to work with additional health professionals not currently available at RMHS and would increase their ability to support women receiving treatment. It may also allow them to provide treatment from different areas of expertise, such as acceptance commitment therapy, emotion regulation, narrative, and IPT. HCPs also identified several specialized areas of practice they would like to be able to offer to mothers. An infant mental health specialist could work with mothers to help them improve attachment with their baby and to potentially prevent mental health problems for their children in the future. It would be helpful to have a dedicated person on staff who could liaise effectively with child protection and community services. It would also be helpful to have someone who can conduct research. There is a great deal of information

available which could be used to link mother and child outcomes, but no one to sort through it and put it together.

Related to the provision of additional services at RMHS, would be an increase in access for mothers requiring treatment. This could include additional office hours to see patients beyond 9-5 or being able to provide telephone support to mothers during the evening when therapists are not typically available. Telephone support would provide access to mothers from all provinces in Atlantic Canada. Becoming more present in the community would be helpful in increasing access to services as well, perhaps rotating through doctors' offices on a regular basis.

HCPs and FPs spoke of wanting to provide additional support for mothers.

According to HCP1, the top items mothers in her care need help with include "childcare, transportation, self-care, wellness, [and] things for themselves," particularly in the postpartum period. In addition to basic needs, she would like to be able to provide them with something that "feeds their spirit" and provides them with a break. HCP3 described her vision of a sort of "respite service" for mothers where workers would be available to mothers in the community when they needed a break.

FPs also identified several wish list items that would enable them to provide additional support to mothers in their care being treated for PPD. The first of these included availability of affordable medications. The cost of medication for some of her patients is covered under Pharmacare, but it does not cover the "working poor". Another suggestion was provided by FP3. She feels mothers with PPD could benefit from someone to talk to – not the services that are available during the day, "but maybe

something that when you're feeling kinda down at 2 in the morning when you're up with your baby (FP3)." She feels this is a need that is not currently being offered.

4.2.5 Summary. Eight health professionals were asked about their experience related to providing treatment to mothers diagnosed with PPD. Four HCPs from RMHS at IWK were interviewed, including three social workers and one psychiatrist. Four FPs were also interviewed, two of whom work in an individual practice, and two of whom work in collaborative practice. Four themes were identified, including, what they see; care plan; challenges; and wish list.

4.3 Social Determinants of Health

Mothers described various socioeconomic factors that either influenced or had the potential to influence their ability to participate fully and engage in treatment; provide for the baby's needs; and to live their lives as they had before the baby was born. As described by Raphael and Mikkonen (2010), the SDOH include income and income distribution; level of educational attainment; unemployment and job security; employment and working conditions; early childhood development; food security; housing; social exclusion; social safety network; access to health services; aboriginal status; gender; race; and disability. Mothers cited concerns about their financial security and ability to pay for transportation, medication, and adequate food or housing; access to health services, particularly well-baby visits and mental health care; lack of social support; and social isolation in being "stuck at home" with their baby. HCPs and FPs named similar concerns. Mothers noted a number of benefits related to the SDOH as well, citing access to community resources and social support; financial benefits for maternity leaves; and access to health services such as their FP or HCP at RMHS.

CHAPTER 5 DISCUSSION

The purpose of this study was to learn more about the influence of treatment on mothers' experience with PPD. This was explored through in-depth interviews with mothers, HCPs at RMHS, and FPs. By comparing perspectives of these participants, this study provides a unique view of the lived experience of PPD.

The majority of mothers indicated that treatment had a positive influence on their experience with PPD. Mothers received a variety of treatments, including regular follow up with their FP; referral to RMHS where they saw a maternal mental health practitioner; appointments with a private therapist; and medication. Aspects of non-pharmacological treatment that mothers found particularly helpful were the opportunity to "put themselves in someone else's hands"; validation of their illness; time to focus on their own needs; and the knowledge that their health care provider truly cared about them. In conjunction with other forms of treatment, the majority of mothers in this study were prescribed medication as part of their treatment, a small number of whom specifically indicated that medication was the key to resolution of their symptoms. Although initially resistant to taking medication for their illness, several mothers eventually came to believe that medication was what they needed, indicating they wished they'd taken it sooner so they could have felt better faster. Less than one-third of mothers were dissatisfied with the services they received from either RMHS or their FP, citing lack of access to care in the community and having to go through their FP; having to ask their FP for help, rather than having their FP ask them; too much time between appointments at RMHS and being discharged before mothers felt ready; not receiving clear direction from their HCP; and poor communication.

Each of the mothers in the study "felt better" at the time of the interview, however mothers had varying perceptions on the idea of recovery. Several of the mothers described feeling some concern about how they will feel long term. Some mothers would say they had recovered; others would say they are recovered but still taking medication; still others believed that recovery from PPD was not truly attainable. These mothers felt quite strongly that PPD could not be defined as a finite event with a beginning and an end. For them, there would be a lifelong journey to stay well. Mothers related this journey to the grief that is carried in your heart when a loved one dies. It is always there, but gradually moves farther away from the surface.

5.1 Socioecological model in context of postpartum depression

A four-level SEM was initially used to examine the relationship between PPD, treatment for PPD and mothers' living situation. This model provides a framework with which to study the complex and ever-changing interactions between a mother and her environment within the context of PPD. Interaction among levels represents the ways mothers interact with their surroundings and is an important consideration in the understanding of how a new mother sees her role and her ability to adjust to motherhood, and how she is able to engage in treatment for PPD. Through analysis of the data, it became apparent that an additional level would be required to fully describe mothers' experience with PPD. A fifth level was added to the SEM (Figure 3), identifying the influence of cultural expectations of motherhood.

At the heart of the SEM is the *individual* (new) mother. Nested around her, and influencing her experience with PPD, are the *relationships* she has with others, particularly her health care provider, family and friends. Also influencing her experience,

and representing the next level in the model, are the resources available in the *community* that can either help a mother's situation, or challenge it. The fourth level of the model is represented by the *institution - policy* and *decision makers* who influence mothers' experience with IWK and FP and resources available within the community.

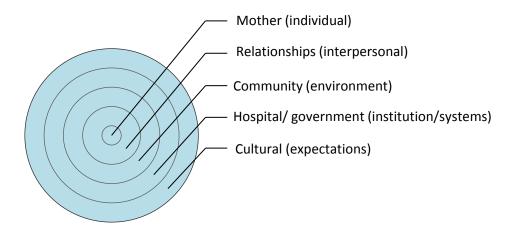


Figure 3. Socioecological model of mothers' journey through postpartum depression

5.1.1 New mother (individual). There are a number of ways in which a mother can influence her own experience with PPD or with treatment for PPD. The first level of influence in the SEM, individual, poses the question, how does a mother influence her own experience with PPD? The most likely way in which a mother can influence her own experience is her ability to recognise or acknowledge that she is ill. Many of the mothers in this study were not able to do this. In some cases mothers knew there was something wrong, but assumed it was a normal part of their adjustment to motherhood. Several mothers felt that they just needed more time- more time to adjust, more sleep- or that they were affected by hormones regulating. They decided they were not ill because they still felt bonded to their children; they were still functioning in their daily routine, or because their symptoms did not fit the diagnosis on a checklist found on the internet. In some

cases mothers noted that symptoms were not quite what they were expecting or that they did not see their own experience in those symptoms. In addition to not being able to acknowledge they were experiencing PPD, more than half of mothers were plagued with lack of sleep which both served as a scape goat for their symptoms, and also clouded their judgement so that it was difficult to realise what was happening around them.

HCPs and FPs commented on the role of stigma in preventing mothers from seeking help for their symptoms, however, for mothers, there was a clear emphasis on an internalised distress that came from within, rather than stigma imposed by others. It took some time for some mothers to acknowledge their symptoms, particularly to themselves. Until they were able to acknowledge their illness to themselves mothers did not seek help from health professionals for treatment. This information has been captured in previous studies, including Holopainen (2002), McCarthy and McMahon (2008), Sword et al. (2008), and Boyd et al. (2011) with an emphasis on lack of recognition of symptoms by mothers; fear of loss of custody of children; and fear of being labelled a bad mother. If mothers were not forthcoming or honest with their FP about their symptoms, they may also have been unlikely to ask family and friends for support.

Stigma refers to how the public responds toward a group of people who share a common attribute (Patten et al., 2016; Pinto-Foltz & Logsdon, 2008), such as mental illness, or more specifically, PPD. Dennis & Chung-Lee (2006), specifically identified fear of disclosure, shame and fear of labelling as factors that prevented women from seeking help for symptoms of depression postpartum. Self-stigma occurs when an individual internalises the negative beliefs of society, resulting in feelings of shame and diminished self-worth (Patten et al., 2016), believing there is something wrong with them

because of their illness. Expectations of becoming a mother are shaped and developed throughout the lifespan, influenced by biological and social influences in a woman's life (Koniak-Griffin, Logsdon, Hines-Martin & Turner, 2006). Camp, Finlay & Lyons (2002) noted that low self-esteem as it relates to the stigma of long-term mental illness was more likely to occur for individuals for whom the "label" of mental illness affected their concept of self, which could include new mothers, and for whom it was more likely to blames themselves for the outcome, for example, PPD. Stigmatization of new mothers is further perpetuated by social standards set for mothers by other women and by "mother-blaming" (blaming a mother for situations that may be beyond her control (Koniak-Griffin et al., 2006).

Although fear of mental illness or stigma were not cited by mothers in this study as reasons why they did not recognise symptoms, several mothers noted that it did prevent them from seeking support from family and friends, and in some cases, prevented them from embracing medication as treatment for their illness. This was commonly associated with a health professional's recommendation of medication for treatment. Many mothers were unwilling to accept medication as treatment; medication was for people who were really sick, and many mothers did not believe it applied to them. Until mothers understood that PPD was not an indication that there was something wrong with them as a person, and that they had a biological condition that required treatment, they were unable to accept treatment. Mothers were much more accepting of other forms of treatment offered, particularly meeting with their FP or therapist on a regular basis.

Expectations also played a significant role in the development of PPD in many mothers. Mothers identified expectations for their birth experience, family and friends,

treatment, and most importantly, motherhood. Several mothers in this study identified that they had not met their own expectations for themselves and for motherhood, resulting in them becoming very unhappy and disappointed in themselves, in many cases not even realising that was the cause of their distress. Mothers expressed their belief that their (perceived) inability to transition into their new role as mothers contributed to the development of PPD. This is in keeping with the results of a previous study of mothers' expectations during the postpartum period. Henshaw, Fried, Teeters, and Siskind (2014) found that expectations related to motherhood held shortly after birth were predictive of later adjustment difficulties and depressive symptoms. Also associated with depressive symptoms early in the postpartum year in the study by Henshaw et al. (2014) was the belief that infant temperament was indicative of a woman's "skill" as a mother. This concern was echoed by mothers in the current study. Mothers were unable to acknowledge their illness until they realised that it was not a reflection of their character, personality, or their ability to be a good mother.

Related to expectations, many mothers who participated in the study described a series of "should's". They felt they "should" be able to do the things they were struggling with and they "should not" need to ask for help. Mothers also noted that they believed motherhood was supposed to come naturally, that they "should" be good at it without a need for adjustment or transition to this new role. Mothers who did find their new role difficult, or felt like they needed help were left wondering what was wrong with them that they were unable to cope. Other mothers who previously found success in life looked inward for the reason why they were struggling postpartum, asking themselves if it meant they were a bad mother, or if they had made a mistake in assuming they could even be a

mother, further contributing to their negative sense of self. Another example of mothers doing what they believed they "should" was evidenced by mothers in this study who either persevered with breastfeeding long past their comfort level, or who continued pumping for months before realising that it was contributing to how they were feeling.

Many mothers had specific expectations of the people in their lives for the postpartum period, including the assumption that they would automatically receive a great deal of support. When others were unaware of, or did not meet these expectations, mothers were left to endure distress, fatigue, and failed expectations independently. They experienced negative changes in these relationships, indicating in some cases, that their relationship would never be the same. For example, a mother who felt she needed more support from her spouse felt as if she had been abandoned in a time of need. She could not understand why he did not understand how badly she was feeling since her husband knew her so well. Not being able to acknowledge or recognise their illness prevented several mothers in the study from fully participating in treatment, for example, by weaning off medication when they felt they were "ready" but without discussion with their FP. Another example of not participating fully in treatment cited by mothers in the study was not understanding how talking to a therapist or counsellor could be helpful in managing the difficulties she felt in her daily life.

Mothers could also influence their experience with PPD in a positive way. One way could be to line up support from their spouse, family, and/or friends prior to the baby's birth, knowing that they may need help and may not be able to ask for it. Mothers could also ask their family and friends to watch for symptoms of PPD in case she couldn't see it herself. Instrumental support could include simply asking a spouse to deal

with feedings while the mother got some sleep. Support could also include talking to their family doctor about how they were feeling, and recruiting professional support or researching options for treatment. Seeking out other mothers may also be helpful, to better understand their common experience with motherhood. Women can even influence their experience by taking part in self-care and relaxing activities.

5.1.2 Relationships (interpersonal). Relationships a mother has in her life may have a great deal of influence over her experience with PPD. Some relationships may offer a protective factor while others provide additional challenges. The relationship with her partner was noted as one of the most influential by participants in this study. Her husband or partner may be able to ease her struggling by providing instrumental support including keeping the house clean and preparing meals; they may provide emotional support by listening to mothers' concerns and helping them as they adjust to motherhood. Mothers' relationship with their partner may also contribute to their PPD if their husband is unwilling to listen to their concerns, actively disregards their concerns, discourages them from seeking help, or is unable to provide them with the practical support they need. Mothers often rely on the support of their husbands and if it is not forthcoming, it contributes to their sense of isolation and helplessness. A similar relationship exists with new mothers' own mothers, and to some extent, their mothers-in-law, in that there is great potential and perhaps expectation of support for a new mom. In contrast, these relationships also have the power to make a mother feel worse and alone in her struggles if her family is not willing or able to listen to her concerns or provide practical support.

Another highly influential relationship as it relates to PPD is a mother's relationship with her health care provider. Her HCP could include a mental health

professional during the postpartum period but typically includes her FP. HCPs at RMHS noted that the therapeutic relationship they develop with their patients is essential to the success of treatment. FPs agreed with the importance of the relationship and building rapport with their patients. FPs in this study felt they know their patients very well and are therefore well positioned to identify any changes in mood or affect following the birth of a baby. This may be one reason why the FP was the first point of contact for most of the mothers in the study. Another reason could be due to their role as gatekeeper in the health system, as discussed later in this chapter (page 112). The FP has the opportunity to normalise and validate symptoms, explaining to mothers that it is not uncommon to develop symptoms of depression after they have had a baby. Other health professionals may be able to validate a mother's concerns as well, including therapists mothers have seen in a previous context, and public health nurses during home visits.

One other relationship that can influence a mother's experience with PPD is that which she establishes with her baby. That is not to say that the nature of a mother's connection with her baby causes her PPD, but a baby's temperament may contribute to a lack of sleep and sense of helplessness, which may then reinforce her symptoms of PPD.

5.1.3 Community (environment). Mothers' experiences are also influenced through various direct and indirect ways within her environment. There are many supports available throughout the community, whether mothers access formal mom and baby activities, attend gatherings at the local library or family resource centre, or check in with public health for a well-baby visit. Family resource centres were often cited as a positive influence for mothers. There are programs available to assist mothers in learning skills related to parenting and being a mother. Other mothers are able to provide a non-

judgmental outlet for a mother's concerns as well as being able to give them the support of having "been there". This allows them to gain emotional support from other mothers and to socialise with other adults who are sharing the same experience.

The SDOH represent various aspects of the community which may influence mothers' help seeking and experience with treatment for PPD, however, they were not specifically cited as a factor by as many mothers in this study as initially suspected. Mothers in the study were generally able to overcome practical issues related to participating in treatment such as transportation and physically attending appointments. Access to reliable transportation, whether it is via public transport or having their own vehicle may help mothers to reach out to others or to travel to various activities, allowing them to access additional support. Some mothers may have no means of communication if they lack the money to pay for a phone, contributing to her sense of isolation. Additional situational stressors such as lack of access to childcare, enough healthy food to eat, or decreased access to resources may contribute to the development of PPD for a mother with a predisposition toward mental illness. As a result of the challenges associated with trying to recruit mothers who truly had low income and low educational achievement, the potential influence of these social determinants was not able to be explored fully.

Having multiple sources of support in the community also influenced mothers' experience with PPD. Several FPs noted that the protective nature of being embedded in a community such as mothers who regularly attend play groups at family resource centres in their communities may actually be lost by mothers who have sufficient resources to pay for baby activities. Mothers' level of income may enable them to access resources

and supports within the community that require payment, however, these mothers may receive less peer support during these activities because they only have that one activity in common.

Discussion with FPs serving low income communities suggested that mothers were more likely to seek support from family and friends from within their own community rather than to seek help externally, including from their FP. Mothers in this community tend not to associate their symptoms with PPD due to the many complications in their lives, and therefore commonly do not seek help from health professionals. It is possible that they are more accustomed to dealing with difficulty in their everyday lives and do not necessarily see it as an extra burden. FPs emphasized the idea that mothers in their community are less willing to trust people from outside their own community, which could include public health nurses, mental health practitioners, and researchers.

5.1.4 Institution (systems). There are a number of ways mothers' experience with PPD is influenced by policies and practices at the institution or systems level. The hospital where mothers and babies receive care, the health authority, and the provincial government are all included in the "health system" in Nova Scotia. Various institutions at this level control decision making regarding access and funding available for all other levels. Access includes waiting lists for community mental health, resources associated with income assistance, and communication between individual departments. These policies, in turn, may have an influence over factors related to the SDOH – safe housing, quality early childhood education, food security, and access to resources, including medication required to treat mental illnesses. Decisions to limit access to public health

home visits and discontinue face to face prenatal education provided by public health nurses are made at this level, which could possibly increase access and influence a mother's connection to a health professional other than their FP. Funding for mental health professionals, including psychiatrists, is another decision made at this level. Lack of access to perinatal mental health practitioners limits mothers from being able to access appropriate health professionals. This concern was brought forward in this study by all groups of participants. Positive influences evident at the systems level include public access to family resource centres, regular well baby checkups with their FP, and community-based public health well-baby visits.

There are several factors related to family medicine that are decided provincially that make it more or less difficult to receive care. Remuneration, for example, is very complicated, and could include a traditional fee for service plan, enhanced fee for service, alternate payment plan, or salary for FPs and may influence how services are provided within that practice (Faloon, 2012). There may be differences among practices between group and individual practice, number of patients booked each day, same-day booking availability, special procedures, obstetrics, all of which can also affect access to a FP. FPs may also be limited in the amount of time they can offer to individual patients due to the high volume of patients they must see. Some FPs, such as those working on an alternate fee structure, may have some flexibility in how they see patients but many FPs may be limited in how quickly they can see women who are struggling with their mood or function postpartum. FPs who participated in this study and who practice in a collaborative health care setting strongly emphasized the usefulness of being located in a

practice where there is increased access to other health professions, particularly with respect to providing support to mothers who are experiencing mental health problems.

At the level of the individual institution, policies and practices in place at IWK Health Centre also have a direct influence over mothers' experience with PPD. This influence begins before a mother is even able to take her baby home. Inconsistent information being provided by staff at the hospital following the birth of their baby was overwhelming for mothers in the current study, particularly for those trying to figure out their new mothering role. Many mothers described feeling overwhelmed with pressure to breastfeed their baby while still in hospital, but did not receive enough support to do so confidently.

The relationship between breastfeeding and PPD has been studied fairly extensively however the nature of the relationship still remains unclear (Pope & Mazmanian, 2016), particularly whether breastfeeding typically comes before or after the symptoms of PPD (Brown, Rance & Bennett, 2015). This lack of clarity is likely a result of the complex biological, psychological, and social factors associated with the development of PPD, and the wide variability in study designs exploring this relationship (Pope & Mazmanian, 2016). Although a causative relationship is not clear, approximately one-third of women in this study experienced difficulty with breastfeeding and symptoms of PPD. Watkins, Meltzer-Brody, Zolnoun and Stuebe (2011) reported the findings of the Infant Feeding and Practices study II, which took place in the United States with over 2000 women who initiated breastfeeding between May 2005 and July 2007. Early negative experiences with breastfeeding were associated with symptoms of PPD at two months. Castro Dias & Figueiredo (2015) found similar results in a systematic review

which revealed that experiencing breastfeeding problems such as pain, low self-efficacy, and negative attitudes, "could also expose women to a higher risk of developing PPD" (p. 152). Shakespeare, Blake and Garcia (2004) noted that similar to motherhood, many mothers found breastfeeding to be more difficult than they expected and associated difficulty breastfeeding with being a bad mother. It may not matter whether breastfeeding difficulty or PPD occur first; it may be more important to recognize that they occur together and note the importance of offering additional support to mothers (Brown et al., 2015). The IWK promotes breastfeeding over bottle-feeding as part of the Baby-Friendly Hospital Initiative (IWKHEALTHCENTRE, 2016, 0:43), however, according to Shakespeare et al. (2004) this global initiative seems to have denied mothers access to expert assistance with bottle-feeding if they are unable to breastfeed, further contributing to their sense of failure as a mother. Mothers in the current study expressed that they felt the difficulties they had with breastfeeding contributed to their PPD.

One way mothers interact with the IWK and other hospital institutions is as patients. Although this information was not collected, some mothers may have received prenatal care at this hospital as well. Each of the women who participated in the study gave birth at IWK and two-thirds of participants were patients at RMHS. The IWK limits access to maternal mental health care by limiting access to this service through its level of staffing, hours of operation, lack of facility to accommodate group sessions, and lack of satellite locations within the community. The capacity of RMHS to see mothers with a range of mental health concerns rather than only mothers who are severely ill is another way IWK influences mothers' experience with PPD, related directly to treatment. Also related to treatment would be availability of childcare during appointments so mothers

can focus on their treatment. Several mothers and HCPs discussed childcare, specifically, as limiting their opportunity to fully engage in treatment during appointments at RMHS, as well as access to RMHS as limiting their ability to receive appropriate treatment.

It is at this level, too, where a mother's fear should be examined. According to HCPs and FPs, mothers may be afraid to seek help for their symptoms of PPD due to fear based on previous involvement with various government agencies, including child protection. Mothers fear they may have their children apprehended if it is discovered that they are struggling in their mothering role, potentially limiting the number of mothers who access help for PPD. One mother expressed this fear based on previous personal experience.

5.1.5 Cultural expectations. Mothers' experience with PPD is also influenced by the contemporary idea of motherhood. Modern expectations of childbearing women include the capacity to multitask, to maintain fitness and appearance, and to retain a work and interpersonal identity beyond her role as mother. Traditional expectations also persist around keeping house, self-sacrifice for the sake of her child and embracing the mothering role. Mothers are required to balance their previous identity with their new role as a mother with the assumption that this adjustment will be a natural and easy transition (Ambrosini and Stanghellini, 2012). Many mothers still feel unable to admit that they find it difficult.

Some mothers in this study expected to feel a certain way toward their baby after they were born, and if they didn't feel that way they assumed there was something wrong with them. Examples of this included babies being more challenging to soothe than expected, babies and mothers having difficulty sleeping, disliking breastfeeding, and

mothers even expressing the thought that they wished they hadn't had a baby. Many of the participants tied unmet expectations, theirs and others, to feelings of shame, doubt, failure and internalized stigma. There is a concern that some mothers may refuse to tell anyone about their thoughts or seek treatment for their depression postpartum because they are afraid of being judged by others. This concern was expressed by both mothers across several income and education categories in the current study and by health professionals as well. The culturally assumed role of women as mothers and primary caregivers was further emphasized for some participants through the perceived lack of support from family, particularly partners.

5.2 Social Determinants of Health and Postpartum Depression

Mothers were asked to provide information about the various factors in their lives that influence their health. These factors are commonly referred to as the SDOH and include income and income distribution; level of educational attainment; unemployment and job security; employment and working conditions; early childhood development; food security; housing; social exclusion; social safety network; access to health services; aboriginal status; gender; race; and disability (Raphael & Mikkonen, 2010). While the SDOH primarily operate at a population level, HCPs at RMHS and FPs indicated they believe key socioeconomic factors to have a significant influence over individual mothers' ability to participate fully and engage in treatment. Conversely, it did not appear to be the case for the mothers who were interviewed. Results of the survey gathering this information are compiled in chapter four (page 47). Existing research states that PPD is most closely associated with lower income and education, followed closely by poor social support and significant life stress. The majority of mothers who participated in this

study had achieved a higher level of education as defined by the study. Approximately one-third of mothers in this study reported a lower income (\$59,999 and less). Given the minimal reported influence of socioeconomic factors over mothers' experience with treatment for PPD, it may be speculated that the positive influences of access to care, community resources, and social support may mitigate the potential negative influences of socioeconomic factors.

Recruitment of mothers with low education and income was difficult. The researcher contacted multiple family resource centres and parenting programs in the community to be invited to present information about this study and to recruit participants. Less than half of the centres contacted invited the researcher to come to a mothers' group to talk about the study. Most centres were not willing to have the researcher come to any of their programs to recruit participants and seemed to be very protective of their mothers. Many were willing to post recruitment notices, however. The researcher was contacted by at least one mother, suspected to be from the target recruitment group who indicated she was afraid to participate, and ultimately, did not. Most women in the study indicated they had someone to talk to about important decisions, a relationship where their skills and talents were recognized, a trustworthy person with whom they can discuss problems, and a strong emotional bond with at least one person. This should indicate a strong social support network, however, many of the mothers indicated during their interview their feeling that a lack of support strongly contributed to their PPD. Several mothers specifically identified their partners and mothers (and mothers-in-law) as not providing sufficient support while they were ill. There is clearly a mismatch between how mothers answered the survey question and how they described their experience with PPD. This is likely attributable to mothers completing the survey based on their current status whereas during the interview they were reflecting on a particularly difficult time in their lives. The mismatch between the two responses is also likely a result of mothers' expectations of the ways they needed and wanted support, in contrast to what others were able to provide and what mothers, themselves, were able to communicate.

Life stress is a social construct with a different meaning for different readers. It is difficult, therefore, to accurately define life stress with a series of questions on a personal information survey. Boyd et al. (2011) defined life stress as decreased access to resources, isolation, under or insecure employment, and unsafe housing. Segre et al. (2007) also included barriers to accessing healthcare to the list of life stressors. In the mothers who participated in this study, life stress was associated with the challenges identified by participants that influenced their experience with PPD. The presence of multiple stressors would confer a level of significance or severity that would vary among individuals. From the survey, less than one-third of mothers indicated they sometimes did not have enough of the kinds of food they wanted to eat or not enough food to eat. Mothers indicated it was difficult for them to be able to afford medication, formula, childcare, and transportation. More than three-quarters of mothers participating in the study identified a significant childhood memory which could represent previous trauma; examples included moving a lot as a kid; having a mother with mental illness; having a mother with a brain tumor; either having a sibling who was (allegedly) sexually abused or being abused themselves; having parents divorce and remarry with a new stepfamily; and parents abusing their self-esteem. Other SDOH associated with PPD including selfreported health status, employment status, ethnic minority status, and marital status, did not appear to influence mothers' experience with PPD in this study.

Mothers' experiences with treatment in this study seemed to be minimally influenced by the SDOH, however, there were commonalities across participants for multiple responses in the survey. Several mothers, two of whom reported both a low income and low education, shared that they did not feel ready to complete treatment when it was time, using the phrase that they felt "pushed out". Low resources available to these individuals may have negatively influenced their ability to state their needs clearly to someone perceived to be in a position of power, i.e. the mental health specialist. For one of these individuals, this inability to state her needs may be linked to poor social support – she indicated on her demographic survey that she did not have someone in her life to whom she could talk about important decisions and problems, who recognized her talents and skills, and with whom she felt a strong emotional bond.

5.3 Similarities and differences between mothers and HCPs and FPs

Mothers, HCPs and FPs were asked to speak about their experiences with treatment for PPD, mothers from the perspective of receiving treatment and HCPs/FPs from the perspective of providing treatment.

There were a number of similarities noted between mothers' description of their experience with treatment for PPD, and HCP/FP's description of their experience providing treatment to mothers with PPD. All participants provided a similar description of the symptoms commonly associated with PPD and both mothers and HCPs/FPs described a common list of challenges. Both groups of participants named stigma of having a mental illness as a reason why some mothers may not seek help. Mothers'

expectations for motherhood and for the postpartum period were another contributing influence to the development of PPD cited by all participants. Participants were asked if they had advice or suggestions on how mothers' experience with treatment could be improved. HCPs/FPs and mothers shared suggestions, particularly increased access to mental health providers and a desire to make things better for other mothers.

There was a number of ways in which women's and HCPs/FPs description of their experiences with treatment for PPD were different. One of these differences was in their description of recovery from PPD. HCPs spoke of PPD as having an end point, or at least a point at which they would no longer require treatment. Many mothers, however, considered their experience with PPD to be part of a long journey. Many of the mothers in the study felt their symptoms would resolve over time, but they would carry their experience with them forever. Another difference in perspective was around challenges related to the SDOH. HCPs at RMHS, particularly, noted these as potential barriers to mothers attending and engaging in treatment. The main challenges noted by mothers, however, were related to getting enough sleep and acknowledging of symptoms and recognizing the need to seek treatment.

The differences between mothers and HCPs/FPs regarding mothers' experience with treatment for PPD highlight implications for practice. The assumption that mothers will seek help for symptoms of PPD is not always true. Findings of this study indicate there are a number of mothers who do not come forward for treatment despite noticing that they are not their usual selves and multiple opportunities through regular interaction with health professionals. The manner in which FPs are asking how mothers are feeling postpartum and public education campaigns are not providing mothers with the tools to

recognise that the way they are feeling is indicative of PPD points to a need to change the way women are informed of and screened for PPD. FPs make a conscientious effort to see low-income patients postpartum (K Horrey, personal communication, January 23, 2017), however, it may be equally important to bring in the "successful" high-functioning women who may be hiding how they are feeling with respect to the transition in their role to motherhood. It can be very difficult to reach past their façade to determine how well they are coping and whether they are feeling any reluctance to talking about how they are feeling.

5.3.1 Journey through postpartum depression. Where the experiences of all participants meet is the story of mothers' journey through PPD, as represented in Figure 4. This diagram tells the story of a mother who discovers that she is struggling after the birth of her baby and experiencing symptoms of PPD. She is unable to meet her own expectations and faces challenges in her transition to becoming a mother. Once she realises she is ill she seeks help, and possibly through support, therapy, medication, or community resources she begins to feel better. Through her treatment, she feels validated and no longer experiences symptoms of PPD. As she moves past this period in her life, she carries a great deal of regret, a desire to help other mothers and the memory of PPD.

5.4 Limitations

As with all research studies, there were some limitations which must be considered when interpreting results. The results of this study represented a small sample size with respect to mothers who have experienced and been treated for PPD and also with respect to the number of FPs providing treatment to mothers with PPD in the community. Findings would likely differ in a community where access to FPs was either greater or decreased,

and/or in a community where access to perinatal mental health specialists was not available.

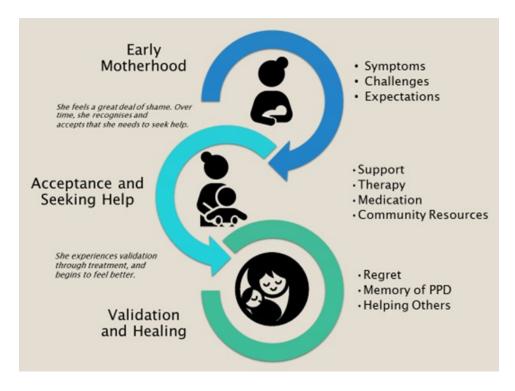


Figure 4. Mothers' journey through postpartum depression.

Several sources of bias may also limit the results. There is the possibility of recall bias on the part of new mother participants, i.e., the possibility that they are remembering their experiences with treatment for PPD differently than how they actually took place. They could remember their experiences in a more or less positive light. There may also have been bias related to the willingness of mothers to volunteer for the study. Mothers who felt empowered, safe, and who had sufficient time and resources to meet with the researcher may have been more likely to volunteer to participate in the study than mothers with fewer resources, who may have felt powerless and that their story was not as important as others.

Lack of consistency in diagnosis of PPD was another potential limitation. Mothers were diagnosed by a variety of health professionals and there was no information formally collected on what tools or formal interview processes, if any, were used to determine the diagnosis. There was also no information collected about previous mental health diagnoses or details about significant childhood memories as indicated on the personal information survey.

It was difficult to recruit a sufficient number of women who were willing to speak about their experiences with treatment for PPD. Although there were many women interested in participating, many of those who showed interest either did not have a singular diagnosis of PPD or they had not sought treatment. Many of the participants had achieved a similar level of education (a higher level of education as defined by the study), and very few women earning a low income consented to participate. This could have been related to a lack of trust of the researcher as a stranger, leaving mothers unwilling to participate, or it could have been related to the various community agencies through which recruitment occurred who were not willing to let a researcher and someone they didn't know come into their centres to speak with mothers.

It is possible also, that staff at RMHS felt obligated to participate since the study originated from that service, despite assurances from the researcher that participation in the study was voluntary. It was also difficult with this group to maintain anonymity as all HCPs had already shared their participation with one another prior to their interviews. Recruitment of FP was limited to a small number of those actually providing care to women with PPD.

A final limitation of this study is related to the potential bias of the researcher. Although this study was guided by the expertise of a psychiatrist, family physician, and PhD-prepared family medicine researcher, who formed the supervisory committee for this researcher's thesis, it is possible that the researcher's previous experience with the study topic did influence the research process during data collection, analysis, and presentation of findings.

5.5 Summary

A qualitative descriptive inquiry was employed for this study, allowing the PI to develop a rich description of participants experience using everyday language. Sufficient detail was collected from participants to provide an authentic and comprehensive summary of their experience. Participants felt comfortable enough with the PI to openly share their experiences and share their desire for other mothers' not to have the same experience. Potential influence of the personal experience of the researcher was minimized by using a semi-structured interview guide while still maintaining flexibility for participants to fully explore their experiences and also through consultation with the supervisory committee who provided input throughout the coding and analytic process. Use of the SEM and key socioeconomic factors provided a lens through which to view the results in a larger context.

Each of the five levels of the SEM influenced mothers' experience with PPD, including their experience with treatment. To the knowledge of this author, mothers' experience with treatment for PPD has not previously been studied using a five-level SEM, providing a unique lens through which to view women's experience with this illness. Use of the SEM further illustrates that there are many factors which contribute to

the development of PPD. As stated by O'Hara and Wisner (2014), PPD is caused by the ever-changing interplay of biological, psychosocial and environment factors, as laid out in the SEM. Prevention and management of this illness require both individual and environmental factors to be addressed. Mothers require support within an environment that fosters and maintains their health.

Based on the experiences they shared, mothers' experience with treatment was minimally influenced by socioeconomic factors. Particularly, their experience with treatment was positively influenced by social supports available at home and within the community and negatively influenced by challenges presenting in their lives.

There were both similarities and differences noted in mothers' and providers' experience with treatment for PPD. Mothers and HCPs had a common description of symptoms, challenges, stigma, and the role of expectations in the development of PPD. Both groups expressed a desire to help improve mothers' experience. They differed in their perception of recovery, the extent of the challenges related to SDOH, and identification of symptoms as PPD.

Several limitations were noted that may influence interpretations of findings and transferability of these results to other mothers receiving treatment for PPD.

CHAPTER 6 CONCLUSION

The purpose of this study was to gain a better understanding of women's experience with PPD as it is influenced by treatment. Fourteen mothers who received treatment for PPD within the past three years, four HCPs from RMHS, and four FPs practicing in the community were interviewed. In addition to participating in an in-depth personal interview, mothers also completed a brief personal information survey to provide details of where individuals "fit" with respect to various health indicators. A five-level SEM was used to examine the various levels of influence over a mother's experience, specifically, the individual, interpersonal, environment, systems, and cultural levels.

6.1 Key findings

One key finding from the study was the limited ability of mothers to recognize that they had PPD. In many cases mothers recognized that they were not feeling like their usual selves, but made the assumption that it was related to the challenges of being a new mother rather than seeking help from a health professional. When they noticed they were not coping well, mothers turned inward, blaming themselves and assuming there was some inherent flaw in their mothering abilities. Mothers had very high expectations of themselves, of motherhood, and of the support that would be available to them from family and friends, however, help was not always forthcoming. The SDOH did not emerge as playing a big role in mothers' ability to participate in treatment; however, they did feel a great deal of shame. Mothers had a difficult time accepting that they required treatment, particularly medication, assuming that treatment for a mental health problem was for other, sicker people. There was also evidence that there is some protection in the

social support provided by participation or attendance at locations where mothers tend to gather, family resource centres for example, as this confers additional support from other mothers.

6.2 Implications for practice

One implication for practice is in how mothers are investigated for postpartum mental health problems. Mothers with access to few resources may have a very strong support network in the community but also may not feel empowered to ask for help from a health professional. Mothers considered to be career-successful may have a great deal of difficulty acknowledging that they are struggling in their new role. This suggests that FPs may need to change how they are discussing postpartum mental health with mothers and ensure they screen mothers formally for depressive symptoms, not just informally during a well-baby visit. FPs may also need to ensure they include dedicated appointment time for mothers and include her support people in the conversation. This finding also suggests that more information regarding symptoms of PPD, and all of its potential variants should be shared with mothers and partners before their new baby arrives.

Despite the fact that a sense of recovery may not have the same implications for practice as would complete resolution of symptoms, several mothers noted that recovery from PPD was not an option for them. Mothers described themselves as being on a journey; the emotional scars of experiencing PPD would fade over time, but they would always carry their memories of their experience with them, as they would for a loved one who had passed away. Mothers described a worry that they would become depressed again, particularly with subsequent children.

Although breastfeeding has been established as the best way to feed a baby, the Baby-Friendly Hospital Initiative has led some mothers experiencing difficulty with breastfeeding to feel as if they have failed as a mother. Mothers in this study said they needed to hear that they were not a failure if they were unable to breastfeed. Providing them with emotional support during breastfeeding could help ease their distress, in addition to honest and realistic communication with mothers who are having pain or difficulty breastfeeding that breastfeeding can be difficult and it is okay for them to stop.

6.3 Recommendations

All participants were asked to provide suggestions for how to improve women's experience with treatment for PPD. Mothers and health professionals identified that it should be a priority in our communities and society to create a culture where the stresses and so-called failures of motherhood are acceptable, or at the very least acceptable for mothers to ask for help in a way that is normalised and non-stigmatised.

The influence of internalized shame and stigma on recognition of illness and readiness to seek care suggests that this is an early barrier to access, and may deserve more attention in community education and in treatment provider approaches, particularly during the engagement phase of care. Normalizing and promoting an honest portrayal of the experience of mothering at the community and cultural levels may also aid in PPD recognition. Recommendations that could be achieved at the individual, interpersonal, or possibly community level would include small changes in practice or implementation of community based supports for mothers. Mothers noted how alone they felt in their struggle with PPD. Establishment of a peer support program would provide mothers with the connection and support of someone who has "been there", and would

take advantage of mothers-who-have-recovered-from-PPD's desire to help mothers who are struggling now. In the absence of education sessions with public health being reinstated, there could also be an effort to speak with mothers during prenatal care about expectations and the possibility of feeling inadequate and overwhelmed in the early postpartum and even beyond. Volunteer resource networks could be established with mothers who are willing to speak about their experiences with new or soon-to-be mothers.

Finally, both HCPs and mothers indicated that it would decrease the burden of getting to appointments if childcare was available during their appointments at IWK, whether it is for maternal mental health treatment or any other appointment. This would allow them to focus on mental health care and be able to participate more fully during prenatal and postpartum check-ups.

There are also recommendations that could be implemented at the systems level based on suggestions for improvement made by mothers and wish list items expressed by HCPs and FPs, most of which are related to the provision of additional services to mothers. Mothers in this study were able to access public health services in the community; however mothers and HCPs noted that it would be beneficial for mothers to be able to attend free prenatal education provided by public health. Mothers are able to attend public health drop—in sessions to ask questions related to their baby's health, breastfeeding and to interact with peers. Many of these sessions are located at family resource centres or other gathering places where mothers are able to access social support. Mothers are also able to attend postpartum check-ups with the FP who provided

their prenatal care in addition to well-baby check-ups with their own FP. Several mothers also had access to home visits with a public health nurse, which they identified as helpful.

Another suggestion would be to create a new fee code for FPs for well-baby checkups to include a checkup for the mother. Another option would be to create an enhanced fee or incentive for FPs who care for mother-baby dyads in their practice. This would provide the opportunity for more frequent and formalised postpartum checks to allow for a regular assessment of "normal" postpartum recovery. Creation of additional collaborative care clinics where mothers have access to multiple health professions, including mental health resources in addition to their FP, would be another recommendation. The public health team could be expanded to include a nurse practitioner or mental health professional to provide counselling or prescribe medication without a doctor's referral, providing a true integration of services. Additional federal funding could be made available to bring all family resource centres to same level of service offering and expand their role so that they could provide mental health services, prenatal care and regular public health services, including education for partners so they know how to identify symptoms of PPD. Development of online resources that can be accessed in the middle of the night, when mothers are up feeding their babies, or soothing babies who are unable to sleep, could be established and promoted among new parents.

An additional recommendation would be to expand the services of RMHS at IWK to include additional professions, hire more staff, and to increase access, including additional office hours, rotation through doctors' offices of maternal mental health care providers, and provision of group therapy in the community. A transition program could be developed for mothers who no longer have PPD, but are subject to vulnerabilities in

their lives which could impair their ability to care for themselves and their child. It would be helpful to provide maternal mental health services in more communities across Nova Scotia, whether it was done through telehealth, training of health professionals throughout the province or through expansion of both public health and family resource centre services. A final recommendation would be to ensure that affordable medications are available to all Nova Scotians.

6.4 Future Research

This study begins to broaden understanding of the various influences on mothers' experience with treatment for PPD. Key socioeconomic factors did not appear to have as much influence over mothers' ability to participate in treatment as expected, leading to the need for further research to better understand what does influence this process and what role is played by the SDOH. It is possible that in addition to potential negative influences of the SDOH that the positive influences allowed mothers to access what they needed at a time when needs are known to be high. Financial support from maternity and employment benefits, social support, and access to health care, for example, may help overcome some of the negative aspects of the SDOH. One initiative would be to work with mothers and community workers in poorly resourced neighbourhoods to recruit women to gain a better understanding of their experiences with treatment for PPD, specifically, what supports are helpful to them, and under what circumstance they would be likely to seek help from a health professional.

Another research area would be to explore women's expectations for motherhood and for themselves, to determine how to break down their external façade and their internal stigma related to poor coping with motherhood. This would also include a study

of where the expectations of self in motherhood arise. A better understanding of how mothers are affected by stigma and/or shame should be undertaken to increase visibility of mental health issues in the community. Further study of social support is required to gain a better understanding of its protective nature in the development of PPD and mitigation of the challenges of motherhood. One question to ask would be, *how is social support defined*? For those experiencing challenges with breastfeeding, an approach should be considered to determine how best to support them so that their sense of inadequacy and distress does not progress to PPD.

Following on mothers' expectations, it would be useful to develop an evidence-based toolkit for investigation of PPD and other postpartum health problems in primary care. Related to primary care, it would be helpful to study how services for mothers with PPD could be integrated in the community to provide them with truly supportive and wrap-around care.

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APPENDIX A New mother interview guide

We are doing this study to better understand women's experience with treatment for postpartum depression as well as the influence of social factors related to this experience. I will need to ask you a series of questions related to your experience with treatment for postpartum depression, and your ability to adapt to being a new mom. The entire interview will be recorded and will take approximately 60-90 minutes. All information will be kept confidential.

Do you have any questions?

Before we go any further I would like to review our consent form. Participation in this study is entirely voluntary. You are free to decline participation and you are free to withdraw from the study at any time. This study has been approved by IWK Health Centre Research Ethics Board

We will start by completing this survey. Feel free to ask me any questions as you complete it.

Do you have any questions before we begin?

Please take your time answering questions, and feel free to let me know if you need a break. If baby or other children are present, please feel free as well to respond to them as necessary.

Tell me what it was like for you in the first few weeks after your baby was born

Did you feel like you needed help?

How did you know what was wrong?

How did you specifically seek help/treatment?

How did you come to treatment

Was it your idea? Whose?

What factors influenced your decision to seek help/treatment?

What were your major sources of support?

Challenges?

What were your expectations for treatment?

How did your care compare to your expectations?

How did you describe your illness to others?

Were you ever given a diagnosis?

How did you participate in your treatment?

What factors influenced your participation in your treatment?

Were you satisfied with the "help/support/treatment" you received?

Can you please describe your treatment

Was there a particular point at which you felt "better"

How did you know?

How do you feel now?

Do you feel that you have recovered?

What do you think had the most significant impact on your recovery?

What was the biggest obstacle?

Do you have any advice for new moms?

For health care providers?

For policy makers?

For family and friends of women struggling with postpartum depression?

Last question: where did you see poster advertising the study?

That is all the questions I have for you today. I want to sincerely thank you for your participation. The information you have shared will help us to understand women's experience of treatment for postpartum depression.

Optional: you have indicated a willingness to be contacted with any further questions, correct? You have also indicated that you would like to receive a copy of the final report by email. Is that correct? Thank you again.

APPENDIX B Health care provider interview guide

As we discussed on the phone, we are doing this study to better understand women's experience with treatment for postpartum depression as well as the influence of social factors related to this experience. I will need to ask you a series of questions related to your work at the clinic. The entire interview will be recorded and will take approximately 60 minutes. All information will be kept confidential.

Do you have any questions?

Before we go any further I would like to review our consent form. Participation in this study is entirely voluntary. You are free to decline participation and you are free to withdraw from the study at any time. This study has been approved by IWK Health Centre ethics review board.

Do you have any questions before we begin?

Please take your time answering questions, and feel free to let me know if you need a break.

Please describe the service you provide to women?

How long have you been practicing in this field?

What is the range of illness you see in your patients?

What types of treatment do you provide?

How do you begin treatment with a new mother?

What is the major source of support you provide to women?

How do you engage mothers into treatment?

What are some of the influences on mothers' engagement?

Are you always able to provide the support you feel is necessary?

if no, what are some of the main challenges you face in providing care to women with postpartum depression?

Are any of these challenges related to participants socioeconomic status?

What do you think is required to improve the service you provide?

Optional: you have indicated a willingness to be contacted with any further questions, correct?

You have also indicated that you would like to receive a copy of the final report by email. Is that correct?

Thank you again.

APPENDIX C Family physician interview guide

As we discussed, we are doing this study to better understand women's experience with treatment for postpartum depression as well as the influence of social factors related to this experience. I will ask you a series of questions related to your experience treating mothers with postpartum depression. The interview will be recorded and will take approximately 60 minutes. All information will be kept confidential.

Do you have any questions?

Before we go any further I would like to review our consent form. Participation in this study is entirely voluntary. You are free to decline participation and you are free to withdraw from the study at any time. This study has been approved by IWK Health Centre ethics review board.

Please take your time answering questions, and feel free to let me know if you need a break.

Please state your profession and the number of years you have been practicing?

Please describe the service you provide to postpartum women?

Please describe your experience providing treatment to mothers with postpartum depression?

Can you share an example? Please tell me about the most "successful"/positive case of postpartum depression you have treated.

Will you also describe your most challenging case to treat?

What types of treatment do you provide?

How do you begin treatment with a new mother?

What is the major source of support you provide to women?

How do you engage mothers into treatment?

What are some of the influences on mothers' engagement?

Are you always able to provide the support you feel is necessary?

if no, what are some of the main challenges you face in providing care to women with postpartum depression?

Are any of these challenges related to participants' socioeconomic status? Please explain.

What resources do you think are required to improve the service you provide?

Optional: you have indicated a willingness to be contacted with any further questions, correct?

You have also indicated that you would like to receive a copy of the final report by email. Is that correct?

Thank you again.

APPENDIX D Personal information survey for new mothers

Research title Exploring the social determinants of health and the experience of participation in treatment for postpartum depression: An ecological, qualitative analysis Study ID:

The overall goal of this study is to explore women's experience with treatment for postpartum depression at IWK. The following survey asks you to answer questions about yourself that will help us to understand your living situation.

If you have questions at any time, please ask.

Facilitator:

The following questions ask about the many factors that affect your health. By health, we mean not only the absence of disease or injury but also physical, mental and social well-being.

In general, woul	ld you say your l	nealth is?		
Excellent	_ Very good	Good	Fair	Poor
What is your ag	e (in years)?			
What is your ma	arital status?		Canaratad	
Married	on lovy		_ Separated _Divorced	
Living comn Widowed	non-iaw	_	_Divolced _ Single, never	married
How many child	lren do you have	?		
The	following questi	ons are about yo	our cultural ba	ackground.
Are you a Cana	dian citizen?			
Yes	_ No			
In what country	were you born?	•		
In what year did	l you first come	to Canada to liv	e?	
Are vou an Abo	riginal person, t	hat is. First Natio	ons. Métis or 1	Inuk/Inuit? First
•		-Status Indians.		
Yes	No			
What is your ra	cial or cultural k	oackground? Yo	ou may belong	to one or more racial
or cultural grou	ps on the follow	ing list. Are you	?	
Arab	Latin A	merican		
Black	South A	sian (e.g., East Ir	ndian, Pakistan	i, Sri Lankan)
Chinese				mbodian, Malaysian,
	Laotian)			
Filipino	West A	sian (e.g., Iranian	, Afghan)	
Japanese	White			
Korean	other (p	lease specify)
Of English or Fi	rench, which lan	guage(s) do you	speak well en	ough to have a
conversation? I	-	<i>G G</i> () (g - ··
English only			Both English	h and French
French only				lish or French

The following questions are about your education.

What is the highest certificate, diploma	or degree that you have completed?			
Less than high school diploma or its eq				
High school diploma or high school equivalency certificate				
Trade certificate or diploma	,			
College, CEGEP or other non-university	ty certificate or diploma			
University certificate or diploma below	-			
Bachelor's degree (e.g. B.A., B.Sc., LI				
University certificate, diploma or degree				
Oniversity certificate, diploma of degree	the decircion's level			
The following question	ns are about your income.			
What is the main source of household in	come in the last 12 months?			
Wages and salaries				
Income from self-employment				
Dividends and interest (e.g., on bonds,	savings)			
Employment insurance				
Worker's Compensation				
Benefits from Canada or Quebec Pensi				
Job related retirement pensions, supera	nnuation and annuities			
RRSP/RRIF (Registered Retirement Sa	wings Plan/Registered Retirement Income			
Fund)				
Old Age Security and Guaranteed Inco	me Supplement			
Provincial or municipal social assistance	ce or welfare			
Child Tax Benefits				
Child support				
Alimony				
Other (e.g., rental income, scholarships	s)			
None				
Can you estimate in which of the followi	ng groups your household income falls?			
Was the total household income in the p				
Less than \$10,000	\$60,000 to less than \$69,999			
\$10,000 to less than \$19,999	\$70,000 to less than \$79,999			
\$20,000 to less than \$29,999	\$80,000 to less than \$89,999			
\$30,000 to less than \$39,999				
\$40,000 to less than \$49,999 \$100,000 to less than \$149,000				
\$50,000 to less than \$59,999	\$150,000 and over			
The following questions	s are about where you work.			
Are you?				
Unemployed	Employed			
Self-employed	Other			
bell employed	Onio			

If employed, do you maternity leave, etc	`	time, drug coverage, dental visits,
Yes		
Not at all stressfu	most days at work ard l Not very s ul Ex	tressful A bit stressful
•		on will change in the next 12 months?
Yes If yes what sort of c	hange do you expect?	
Th	ne following questions	are about where you live.
•	ou) with your housing	
Very satisfiedDissatisfied	SatisfiedVery dissat	Neither satisfied nor dissatisfied tisfied
	ou) with your neighbo Satisfied Very dissat	orhood? Neither satisfied nor dissatisfied tisfied
How many persons	usually live at this add	dress, including you?
Please describe whe Owned by you or Rented, even if no	a member of this hous	ehold, even if it is still being paid for
What type of dwelling House	ng do you live in? Apartment	Condominium
The fo	ollowing questions are	about how and what you eat.
	_	scribes the food eaten in your household in
You and your fan Sometimes you a	nily always had enough	•
0		may have happened to you while you were you moved out of the house.

	house) that v		were younger (before you it (scary, painful, happy) t	
	-			
Yes Are you willir	110 1g to provide	an evamnle?		
THE you willing	ig to provide	an example.		
The follow	ing questions	s ask you to des	cribe your social supports.	
	ribe your sen	se of belonging	to your local community?	Would
you say it is?				
Very strong				
Somewhat strong				
Somewhat weak				
Very weak				
other people.			bes your current relationship	ps with
		-	nt decisions in my life.	
Strongly agree	Agree	Disagree	Strongly disagree	
I have a relationship	where my ta	lent and skills a	are recognized.	
-	•		Strongly disagree	
_				
There is a trustworth	ıy person I c	ould turn to for	advice if I were having pr	oblems.
Strongly agree	Agree	Disagree	Strongly disagree	
I feel a strong emotion	anal hand wi	th at loast one o	than narsan	
e			-	
Subligly agree	Agree	Disagree	Strongly disagree	
	Thank you	for completin	ig this survey.	

APPENDIX E New mother consent form

Consent Form – Patient participants



Research Title:

Exploring the social determinants of health and the experience of participation in treatment for postpartum depression: An ecological, qualitative analysis

Researcher(s)

Principle Investigator: Anne Mahalik, BSc, MAHSR (c)

IWK Health Centre/Dalhousie University

Graduate student

Co-investigator: Joanne MacDonald, MD

IWK Health Centre/Dalhousie University

Co-supervisor

Co-investigator: Emily Gard Marshall, BA, MSc, PhD

Dalhousie University

Co-supervisor

Co-investigator: Kathleen Horrey, MD

Dalhousie University

Co-supervisor

Funding

This research has not received funding from any sponsor.

Introduction

You are being invited to take part in the research study named above. This form provides information about the study. Before you decide if you want to take part, it is important that you understand the purpose of the study, the risks and benefits and what you will be asked to do.

You do not have to take part in this study. Taking part is entirely voluntary (your choice). Informed consent starts with the initial contact about the study and continues until the end of the study. A staff member of the research team will be available to answer any questions you have. You may decide not to take part or you may withdraw from the study at any time. This will not affect the care you or your family members will receive in any way.

Why are the researchers doing the study?

The researcher(s) want to learn more about women's experience with treatment for postpartum depression. They are also trying to understand whether other factors in their lives (for example, education, income, where you live, social support, etc.) influenced their personal experience with treatment and/or seeking help, and their ability to adapt to being a new mother. These are

important to know about so that treatment programs and community supports for postpartum depression can be designed to be most helpful to new moms.

How will the researchers do the study?

This is a qualitative study where participants are asked to describe their experiences using their own words. Similarities and differences among experiences will be grouped into themes to gain a better understanding of the experience of treatment for postpartum depression.

Approximately 14-20 participants will be interviewed.

Participants may be invited to take part in the study by their health care provider in the Reproductive Mental Health Service at IWK. Former patients of the Reproductive Mental Health Service at IWK who received treatment for postpartum depression within the last 3 years, may be invited to participate in the study by receiving a letter from the Service containing information about the study. Additional participants may be recruited though posters advertising the study with various physicians, and via an online posting on Kijiji (Bedford/Halifax/Dartmouth/Cole Harbor).

Additionally, 3 health care providers from the Reproductive Mental Health Service will be interviewed.

What will I be asked to do?

You will be asked to complete a paper survey about yourself and some of the things around you that affect your health (for example, education, income, where you live, social support, etc.). This should take approximately 5-7 minutes.

You will also be asked to participate in person in a personal interview with the researcher to describe some of your early experiences with your new baby and your experiences with receiving treatment for postpartum depression. The interview will take approximately 60-90 minutes. The researcher would like to be able to contact you again at a later date to review some of your responses to ensure she has captured your experiences accurately.

What are the burdens, harms, and potential harms?

The greatest risk to you as a participant is the possibility of emotional distress related to the memory of when you were unwell and struggling with postpartum depression and the adjustment to motherhood. The interview will be scheduled at your convenience, in a place where you feel comfortable. If you are feeling distressed following the interview you will be encouraged to contact your health care provider. You will also receive a list of community resources that may be helpful. It is difficult to know how you will feel following the interview.

You may also have concerns about whether your information will be kept private. The only people who will know your identity are members of the research team, although other people (including your health care provider) may recognize your "story" in the research results. There may be other, unforeseen risks that arise as a result of participation.

What are the possible benefits?

Taking part in this study may be of no direct benefit to you personally. It is possible that by sharing your story with the researcher, you will feel more comfortable sharing your story with others, including family and friends. You may find this helpful.

It is hoped that what is learned can help women in the future who are struggling with postpartum depression. It may also help those who provide treatment and support to women with postpartum depression to provide better treatment.

What alternatives to participation do I have?

You may choose not to participate in this study. Choosing not to participate in the study will not affect the care you or your family receive at IWK Health Centre.

Can I withdraw from the study?

You may withdraw from the study at any time. Withdrawing from the study will have no effect on the care you and your family receive. If you choose to withdraw, all data provided through participation in the study will be destroyed.

Will the study cost me anything and, if so, how will I be reimbursed?

Participation in this research study should not cost you anything. Participants will receive a \$25 gift card to a local grocery store as a thank you for their participation.

Are there any conflicts of interest?

None of the investigators are receiving payment for the conduct of this study. There may be a perceived conflict of interest in that one of the researchers is also a physician and former clinical leader within the Reproductive Mental Health Service at IWK, who provides treatment for postpartum depression. She may have access to patient participant information, but none of her patients will knowingly be invited to participate in the study.

You may contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm, should you have any concerns about the study.

What about possible profit from commercialization of the study results?

There is no potential for profit to be made from this research study.

How will I be informed of study results?	
You may receive a typed copy of your individual interview if you would like.	
You may receive a summary of research results if you would like.	
Would you like to receive a transcript (typed copy) of your interview? Yes No	_
Would you like to receive a summary of research results? Yes No	
If yes, please provide your email address	

How will my privacy be protected?

Your health care provider will not be informed of your participation. Participants will remain anonymous throughout the study. All interviews will be recorded and transcribed (typed) by the researcher. Any identifying characteristics will be removed from the transcript and each will be assigned a unique study identifier. Digital audio files will have restricted access (i.e. the immediate research team only) and will be identified by unique study ID. Hard copy files will be kept in a locked cabinet in the researcher's office, at Dalhousie University. Original consent forms will also be kept in a locked filing cabinet in the researcher's office. Digital files will be stored on a password protected hard drive, with each individual file requiring a separate password, accessible by research team members only.

The researcher plans to share the results of this study with other researchers and health care practitioners. As part of the consent process, you are asked to provide permission for the use of quotations in any academic writing and/or presentation based on this research. In these quotations, you will remain anonymous. All files will be destroyed five years after any academic writing and/or presentations.

As part of the consent process, you are asked to provide permission for the use of quotations in any academic writing and/or presentation based on this research. In these quotations, you will remain anonymous.

Your health care provider will not be made aware of your participation. If any issues or concerns arise as a result of your participation in this study, you are encouraged to contact your health care provider.

If you provide information to the researcher(s) that indicates you are likely to harm yourself, your child(ren) or others, the researcher is required to contact the appropriate authority. This may include child protection services, mobile crisis unit for mental health, or local police.

All research taking place at IWK is subject to ongoing monitoring. It may be necessary for the IWK research audit committee to review documents related to research activities.

What if I have study questions or problems?

You may contact the researcher at any time if you have questions about this study.

Anne Mahalik, Principle Investigator Anne.mahalik@dal.ca (preferred) 473-8400

You may also contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm

What are my Research Rights?

Your signature on the form indicates that you have understood the information regarding participation in the research project to your satisfaction and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. If you become ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. You are free to withdraw from the study at any time without jeopardizing the health care you are entitled to receive.

Future contact/future research/other use.

The researcher may want to contact you after all interviews have been completed. This would provide you with the opportunity to review the results of the research and would provide the researcher with the opportunity to clarify anything you said during your interview.

email:	telephone:

Please provide your email address and telephone number for this purpose:

Signature Page – Consent form

Study title : Exploring the social determinants of health and the experience of participation in treatment for postpartum depression: An ecological, qualitative analysis
Participant ID: Participant INITIALS:
Participant Consent I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference.
I freely agree to participate in this research study (initials)
I agree to allow the researcher to contact me at a later date to clarify my responses to interview questions. This will allow me to review a typed copy of my individual interview. I have provided my email address and telephone number for this purpose (initials)
I agree to allow the researcher to use quotations in any academic writing and/or presentations based on this research. In these quotations, my name will not be provided (initials)
Name: (Print) Signature: Date: Time:
STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.
Name: (Print)
Signature: Position: Date: Time:
STATEMENT BY PERSON OBTAINING CONSENT I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating
Name (Print)
Signature: Position: Date: Time:
Date: Time:

APPENDIX F Health care provider consent form

Consent Form – Staff participants



Research Title:

Exploring the social determinants of health and the experience of participation in a targeted treatment program for postpartum depression: An ecological, qualitative analysis

Researcher(s)

Principle Investigator: Anne Mahalik, BSc, MAHSR (c)

IWK Health Centre/Dalhousie University

Graduate student

Co-investigator: Joanne MacDonald, MD

IWK Health Centre/Dalhousie University

Co-supervisor

Co-investigator: Emily Gard Marshall, BA, MSc, PhD

Dalhousie University

Co-supervisor

Funding

This research has not received funding from any sponsor.

Introduction

You are being invited to take part in the research study named above. This form provides information about the study. Before you decide if you want to take part, it is important that you understand the purpose of the study, the risks and benefits, and what you will be asked to do.

You do not have to take part in this study. Taking part is entirely voluntary (your choice). Informed consent starts with the initial contact about the study and continues until the end of the study. A staff member of the research team will be available to answer any questions you have. You may decide not to take part or you may withdraw from the study at any time. This will not affect your job or work environment at the IWK Health Centre in any way.

Why are the researchers doing the study?

The researcher(s) are looking to understand patients' experience of treatment for postpartum depression. The researchers are also looking to see if any of the social factors in patients' lives (for example, education, income, where you live, etc.) influence their experience with treatment and their ability to adjust to the responsibilities of new motherhood. These are important to consider so that treatment programs for postpartum depression can be designed to be most helpful to new moms.

How will the researchers do the study?

This is a qualitative study where participants are asked to describe their experiences using their own words. Similarities and differences among experiences will be grouped into themes to gain a better understanding of the experience of treatment for postpartum depression.

As a health care provider in the Reproductive Mental Health Service at IWK you will be introduced to the study by the Principle Investigator (PI) during a team meeting. You will receive information about the study and be asked to contact the PI to volunteer. A minimum of three staff members will be interviewed (psychiatrist, social worker, and nurse specialist). Additionally, 14-20 patient participants will be invited during their final visit with their health care provider to participate in the study.

What will I be asked to do?

You will be asked to participate in person in an interview with the researcher to describe some of your experiences working with new moms and delivering care in the Reproductive Mental Health Service at IWK. The interview may take place at a time and place of your choosing and will take approximately 60-90 minutes. The researcher would like to be able to contact you again at a later date to review some of your responses to ensure she has captured your experiences accurately.

What are the burdens, harms, and potential harms?

There are several potential harms that may result from your participation. Discussion of your experiences in working with new mothers may elicit a sense of frustration in your desire to do a good job. This frustration may be with your employer, your colleagues, or the patients themselves. There is also a possibility that you may be concerned that your responses could be viewed by someone outside the research team or that you may be recognized by the information you provide. It may be uncomfortable to provide information that may be perceived as negative about your department and/or your employer. The researcher(s) will follow the process outlined in this consent document to keep your responses anonymous.

You are encouraged to contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm if you have any questions or concerns about this study.

What are the possible benefits?

Taking part in this study may be of no direct benefit to you personally. It is hoped that what is learned can help health care providers who work with women struggling with postpartum depression to help mothers be more engaged in the treatment process and to provide treatment that is better able to meet their needs.

What alternatives to participation do I have?

You may choose not to participate in this study. Choosing not to participate in the study will not affect your job or work environment at IWK Health Centre.

Can I withdraw from the study?

You may withdraw from the study at any time. Withdrawing from the study will have no effect on your job or work environment at IWK Health Centre. If you choose to withdraw, all data provided through participation in the study will be destroyed.

Will the study cost me anything and, if so, how will I be reimbursed?

Participation in this research study should not cost you anything. There is no compensation offered for participation.

Are there any conflicts of interest?

None of the investigators are receiving payment for the conduct of this study. There may be a perceived conflict of interest in that one of the researchers is also a physician and former clinical lead within this service. She will have access to participant information, including typed transcripts and signed consent forms.

You may contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm should you have any concerns about the research process.

What about possible profit from commercialization of the study results?

There is no potential for profit to be made from this research study.

How will I be informed of study results?		
You may receive a typed copy of your individual interview if you woul	d like.	
You may receive a summary of research results if you would like.		
Would you like to receive a transcript (typed copy) of your interview?	Yes	_ No
Would you like to receive a summary of research results? Yes_	No_	_
If yes, please provide your email address		_

How will my privacy be protected?

Participants will remain anonymous throughout the study. All interviews will be recorded and transcribed (typed) by the PI. Any identifying characteristics will be removed from the transcript and each will be assigned a unique study identifier. Digital audio files will have restricted access (i.e. the immediate research team only) and will be identified by unique study ID. Hard copy files and original consent forms will be kept in a locked cabinet in the researcher's office at Dalhousie University. Digital files will be stored on a password protected hard drive, with each individual file requiring a separate password, accessible by research team members only.

The researcher plans to share the results of this study with other researchers and health care practitioners who work with women struggling with postpartum depression. As part of the consent process, you are asked to provide permission for the use of quotations in any academic writing and/or presentation based on this research. In these quotations, you will remain anonymous, but will be identified as a "health care provider". All files will be destroyed five years after any academic writing and/or presentations.

Other members of your team and/or your Department Head will not be made aware of your participation. The results of the study will be shared with your team and/or Department Head, but you will not be identified by name or by specific profession. You will be identified as a health care provider to differentiate your response from patient responses.

If you provide information to the researcher(s) that indicates you are likely to harm yourself or others, the researcher is required to contact the appropriate authority. This could include the mobile crisis unit for mental health or local police department.

All research taking place at IWK is subject to ongoing monitoring. It may be necessary for the IWK research audit committee to review documents related to research activities.

What if I have study questions or problems?

You may contact the researcher at any time if you have questions about this study.

Anne Mahalik, Principle Investigator Anne.mahalik@dal.ca (preferred) 473-8400

You may also contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm

What are my Research Rights?

Your signature on the form indicates that you have understood the information regarding participation in the research project to your satisfaction and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. If you become ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. You are free to withdraw from the study at any time without jeopardizing the health care you are entitled to receive.

Future contact/future research/other use.

The researcher may want to contact you after all interviews have been completed. This would provide you with the opportunity to review a summary of the results of the research and would provide the researcher with the opportunity to clarify anything you said during your interview.

Please provide your email address and tele	phone number for this purpose:
email:	
telephone:	

Signature Page – Consent form (Staff participants)

Study title : Exploring the social determinants of health and the experience of participation in a targeted treatment program for postpartum depression: An ecological, qualitative analysis
Participant ID: Participant INITIALS:
Participant Consent I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference.
I freely agree to participate in this research study (initials)
I agree to allow the researcher to contact me at a later date to clarify my responses to interview questions. This will allow me to review a typed copy of my individual interview. I have provided my email address and telephone number for this purpose (initials)
I agree to allow the researcher to use quotations in any academic writing and/or presentations based on this research. In these quotations, my name will not be provided (initials)
Name: (Print) Signature: Date: Time:
STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.
Name: (Print) Signature: Position: Date: Time:
STATEMENT BY PERSON OBTAINING CONSENT I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating
Name (Print) Signature: Position: Date: Time:

APPENDIX G Family physician consent form

Consent Form – Family Physicians



Research Title:

Exploring the social determinants of health and the experience of participation in a targeted treatment program for postpartum depression: An ecological, qualitative analysis

Researcher(s)

Principle Investigator: Anne Mahalik, BSc, MAHSR (c)

IWK Health Centre/Dalhousie University

Graduate student

Co-investigator: Joanne MacDonald, MD

IWK Health Centre/Dalhousie University

Co-supervisor

Co-investigator: Emily Gard Marshall, BA, MSc, PhD

Dalhousie University

Co-supervisor

Co-investigator: Kathleen Horrey, MD

Dalhousie University

Co-supervisor

Funding

This research has not received funding from any sponsor.

Introduction

You are being invited to take part in the research study named above. This form provides information about the study. Before you decide if you want to take part, it is important that you understand the purpose of the study, the risks and benefits, and what you will be asked to do.

You do not have to take part in this study. Taking part is entirely voluntary (your choice). Informed consent starts with the initial contact about the study and continues until the end of the study. A member of the research team will be available to answer any questions you have. You may decide not to take part or you may withdraw from the study at any time. This will not affect your relationship with the IWK Health Centre in any way.

Why are the researchers doing the study?

The researcher(s) are looking to understand patients' experience of treatment for postpartum depression. The researchers are also looking to see if any of the social factors in patients' lives (for example, education, income, where you live, etc.) influence their experience with treatment and their ability to adjust to the responsibilities of new motherhood. These are important to consider so that treatment programs for postpartum depression can be designed to be most helpful to new moms.

How will the researchers do the study?

This is a qualitative study where participants are asked to describe their experiences using their own words. Similarities and differences among experiences will be grouped into themes to gain a better understanding of the experience of treatment for postpartum depression.

As a family physician who provides care to postpartum women, you will be invited to participate in the study by letter. You will receive information about the study and be asked to contact the PI to volunteer. Up to four family physicians will be interviewed.

Additionally, 14-20 patient participants will be invited to participate in the study.

What will I be asked to do?

You will be asked to participate in person in an interview with the researcher to describe some of your experiences working with new moms and providing treatment to mothers with postpartum depression. The interview may take place at a time and place of your choosing and will take approximately 60-90 minutes. The researcher would like to be able to contact you again at a later date to review some of your responses to ensure she has captured your experiences accurately.

What are the burdens, harms, and potential harms?

There are several potential harms that may result from your participation. Discussion of your experiences in working with new mothers may elicit a sense of frustration in your desire to do a good job. This frustration may be with your employer, your colleagues, or the patients themselves. There is also a possibility that you may be concerned that your responses could be viewed by someone outside the research team or that you may be recognized by the information you provide. It may be uncomfortable to provide information that may be perceived as negative about your department and/or your employer. The researcher(s) will follow the process outlined in this consent document to keep your responses anonymous.

You are encouraged to contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm if you have any questions or concerns about this study.

What are the possible benefits?

Taking part in this study may be of no direct benefit to you personally. It is hoped that what is learned can help health care providers who work with women struggling with postpartum depression to help mothers be more engaged in the treatment process and to provide treatment that is better able to meet their needs.

What alternatives to participation do I have?

You may choose not to participate in this study. Choosing not to participate in the study will not affect your relationship with IWK Health Centre.

Can I withdraw from the study?

You may withdraw from the study at any time. Withdrawing from the study will have no effect on your relationship with IWK Health Centre. If you choose to withdraw, all data provided through participation in the study will be destroyed.

Will the study cost me anything and, if so, how will I be reimbursed?

Participation in this research study should not cost you anything. There is no compensation offered for participation.

Are there any conflicts of interest?

None of the investigators are receiving payment for the conduct of this study. There may be a perceived conflict of interest in that one of the researchers is also a physician and former clinical lead within this service. Another of the researchers is a family doctor in the community. Each individual may have access to participant information, including typed transcripts and signed consent forms.

You may contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm should you have any concerns about the research process. What about possible profit from commercialization of the study results?

There is no potential for profit to be made from this research study.

now will I be informed of study results:
You may receive a typed copy of your individual interview if you would like.
You may receive a summary of research results if you would like.
Would you like to receive a transcript (typed copy) of your interview? Yes No
Would you like to receive a summary of research results? Yes No
If yes, please provide your email address

How will my privacy be protected?

Participants will remain anonymous throughout the study. All interviews will be recorded and transcribed (typed) by the PI. Any identifying characteristics will be removed from the transcript and each will be assigned a unique study identifier. Digital audio files will have restricted access (i.e. the immediate research team only) and will be identified by unique study ID. Hard copy files and original consent forms will be kept in a locked cabinet in the researcher's office at Dalhousie University. Digital files will be stored on a password protected hard drive, with each individual file requiring a separate password, accessible by research team members only.

The researcher plans to share the results of this study with other researchers and health care practitioners who work with women struggling with postpartum depression. As part of the consent process, you are asked to provide permission for the use of quotations in any academic writing and/or presentation based on this research. In these quotations, you will remain anonymous, but will be identified as a "health care provider". All files will be destroyed five years after any academic writing and/or presentations.

Other members of your team and/or your Department Head will not be made aware of your participation. You will not be identified by name or by specific profession in the results of the study. You will be identified as a health care provider to differentiate your response from patient responses.

If you provide information to the researcher(s) that indicates you are likely to harm yourself or others, the researcher is required to contact the appropriate authority. This could include the mobile crisis unit for mental health or local police department.

All research taking place at IWK is subject to ongoing monitoring. It may be necessary for the IWK research audit committee to review documents related to research activities.

What if I have study questions or problems?

You may contact the researcher at any time if you have questions about this study.

Anne Mahalik, Principle Investigator Anne.mahalik@dal.ca (preferred) 473-8400

You may also contact the Research Office of the IWK Health Centre at (902) 470-8520, Monday to Friday between 8:00 am and 4:00 pm

What are my Research Rights?

Your signature on the form indicates that you have understood the information regarding participation in the research project to your satisfaction and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. If you become ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. You are free to withdraw from the study at any time without jeopardizing the health care you are entitled to receive.

Future contact/future research/other use.

The researcher may want to contact you after all interviews have been completed. This would provide you with the opportunity to review a summary of the results of the research and would provide the researcher with the opportunity to clarify anything you said during your interview.

ricase prov	ide your em	an address ar	id telephone	iluliloci ioi i	ins purpose.
email:					
telephone:_					

Please provide your email address and telephone number for this nurpose:

Signature Page – Consent form (Staff participants)

Study title : Exploring the social determinants of health and the experience of participation in a targeted treatment program for postpartum depression: An ecological, qualitative analysis
Participant ID: Participant INITIALS:
Participant Consent I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that I have the right to withdraw from the study at any time without affecting my care in any way. I have received a copy of the Information and Consent Form for future reference.
I freely agree to participate in this research study (initials)
I agree to allow the researcher to contact me at a later date to clarify my responses to interview questions. This will allow me to review a typed copy of my individual interview. I have provided my email address and telephone number for this purpose (initials)
I agree to allow the researcher to use quotations in any academic writing and/or presentations based on this research. In these quotations, my name will not be provided (initials)
Name: (Print) Signature: Date: Time:
STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study.
Name: (Print) Signature: Position: Date: Time:
STATEMENT BY PERSON OBTAINING CONSENT I have explained the nature of the consent process to the participant and judge that they understand that participation is voluntary and that they may withdraw at any time from participating
Name (Print) Signature: Position: Date: Time:

APPENDIX H Protocol for managing transcripts

Participant ID code

A three-part code will be used to identify participants: "XX# YYYYMMDD", where

- "XX" represents the type of participant: NM=new mom; HCP=staff member at RMHS
- "#" represents the number in the series of interviews
- "YYYYMMDD" represents the date of the interview

Document naming convention

- Audio When an audio file is saved to the project folder, it will be given a name beginning with the participant code as noted above.
- Transcription after the audio file has been transcribed, it will retain the participant code as noted above.

Transcription instructions

- Use Microsoft word and save the transcript according to the naming convention above.
- Please label the participants according to the participant ID code above, excluding the year. For example, the first patient participant to be interviewed would be [NM1]; the second [NM2], etc.
- All interviews will be conducted by the Principle Investigator, Anne Mahalik. These are to be labeled *Facilitator* throughout the transcripts.
- Please provide verbatim transcription.
- Don't ignore grammar. Ignore and do not type the "ums" and "uhs".
- Remove all names and identifying professions, and replace with [DESCRIPTIVE NOUN].
- Include in square brackets any editorial comments including long pauses, laughter, expression of emotion, or segments that are muffled or unintelligible.